AD-A100 197 AIR FORCE OCCUPATIONAL MEASUREMENT CENTER RANDOLPH AFB TX F/G 5/9
AIRCRAFT CONTROL AND WARNING (AC & W) RADAR CAREER LADDER AFSC --ETC(U)
FEB 81

UNCLASSIFIED NL

1 OF 1
AD
A100197

END
DATE
FILMED
7 81
DTIC

LEVEL II

UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

ELECTRONICS PRINCIPLES INVENTORY (EPI)

AIRCRAFT CONTROL AND WARNING (AC & W)

RADAR CAREER LADDER

AFSC 303X2

AFPT 90-XXX-222

FEBRUARY 1981

OCCUPATIONAL ANALYSIS PROGRAM
USAF OCCUPATIONAL MEASUREMENT CENTER
AIR TRAINING COMMAND
RANDOLPH AFB, TEXAS 78148

TABLE OF CONTENTS

	PAGE NUMBER
PREFACE	iii
INTRODUCTION	1
PRESENTATION OF RESULTS	4
APPENDIX A	7

PREFACE

This report presents the preliminary results of an Air Force Electronics Principles Survey of the Aircraft Control and Warning (AC & W) Radar career ladder (AFSC 303X2). The project was undertaken at the request of Mr. James R. Haupt, Training Manager, Keesler AFB, MS. Authority for conducting electronics principles inventories is contained in AFR 35-2. Computer printouts from which the report was produced are available for use by operating and training officials.

The Electronics Principles Inventory (EPI) was originally developed by Mr. Hendrick W. Ruck and Major Thomas J. O'Conner in 1976. It was revised and updated by Mr. James L. Slovak, Inventory Development Specialist, and Captain Frederick B. Bower, Jr., Occupational Survey Analyst, in 1979.

Captain Michael D. Hill and Mr. Guy B. Cole analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Jimmy L. Mitchell, Chief, Airman Career Ladders Analysis section, Occupational Analysis Branch, USAF Occupational Measurement Center, Randolph AFB, Texas 78148.

Copies of this report are available to air staff sections, major commands, and other interested training and management personnel upon request to the USAF Occupational Measurement Center, attention to the Chief, Occupational Analysis Branch (OMY), Randolph AFB, Texas 78148.

This report has been reviewed and is approved.

BILLY C. McMASTER, Col, USAF
Commander
USAF Occupational Measurement Center

WALTER E. DRISKILL, Ph.D.
Chief, Occupational Analysis Branch
USAF Occupational Measurement Center

ELECTRONIC PRINCIPLES INVENTORY REPORT
AIRCRAFT CONTROL AND WARNING (AC & W) RADAR CAREER LADDER
(AFSC 303X2)

INTRODUCTION

This is a preliminary report of the Electronic Principles Survey of the Aircraft Control and Warning (AC & W) Radar career ladder (AFSC 303X2). It was completed by the Occupational Analysis Branch, USAF Occupational Measurement Center in February 1981. This preliminary report is intended primarily to provide an overview of electronic principles data by skill levels for immediate use by technical training school personnel. A more comprehensive display of the electronic principles data will be provided in a follow-on report to be published in a few months.

Purpose

The aim of the electronic principles survey program is to provide reliable data on the extent electronic fundamentals training is actually used in the performance of various Air Force jobs.

General Background

The EPI is a knowledge based job inventory which identifies the range of electronic principles personnel must understand to perform any electronics oriented job. Training managers can use EPI data in conjunction with OSR data to determine precisely what specialists do and what electronic principles they employ on the job. By using EPI and OSR data in this manner, training managers satisfy one of the most important aspects of the instructional systems development (ISD) process:

Determine what specialists do on the job before developing a course to train individuals to perform the job.

The USAF Occupational Measurement Center provides job performance data to training personnel in the form of occupational survey reports and training extracts. Such data are presented in task statements which are quantified according to percent members performing, percent time spent, task difficulty, and training emphasis. This task statement data provides a very precise picture of the kinds of functions personnel in a specific AFSC or shred actually perform at a specific point in time. If OSR data is properly applied, it can be a powerful tool in the design of training content.

However, OSR task statements are difficult to translate into knowledge requirements. This is especially true of tasks which require some degree of electronic knowledge. Prior to the development of the EPI, training managers and command representatives had to rely on subjective interpretations of task statements to arrive at the kinds of knowledge required to perform electronic oriented tasks. This requirement of a more objective criteria for determining the amount of electonic knowledge necessary to perform the job resulted in the development of the EPI.

History

The initial request to develop a method of determining electronic fundamentals used on the job was made by Major General Charles G. Cleveland, the Deputy Chief of Staff, Technical Training, Air Training Command, in 1974. At the time, General Cleveland needed some means of accurately measuring how much electronic fundamentals training was actually used on the job. He envisioned using EPI data to streamline training by eliminating "nice to know" information in the area of electronic theory.

At the general's request, Dr. Walter E. Driskill, Chief of the Occupational Analysis Branch, set up a task force to conceptualize, develop, and apply a method for measuring job usage of electronic principles. The task force was composed of personnel from the Occupational Analysis Branch who were well qualified in theoretical physics and electronics. These personnel also had considerable expertise in task analysis and survey development. With the assistance by these individual, electronic experts from five ATC Technical Training Centers, averaging 12 years maintenance experience and four years of electronic principles instruction experience, spent three weeks working on the development of the EPI. This tentative EPI was then reviewed and refined by over 300 maintenance personnel from SAC, TAC, ADC, MAC, and AFSC as well as personnel at the Electronic Engineering Department of the USAF Academy and the Air Force Human Resources Laboratory. The resulting EPI contained 1,257 items uder 62 subject matter areas covering all electronic principles training given at the five ATC Technical Training Centers.

During 1977, this EPI was administered to more than 11,000 airmen in 54 different Air Force specialties. Since the aim of the EPI was to determine the extent electronic fundamentals training was actually used in the performance of Air Force jobs, the logical person to survey was one at the worker level with sufficient time on the job to understand all that it entailed. Consequently, only 5-skill level personnel with more than 18 months active duty service were surveyed. Results from this project were used extensively by the various training managers to refine their respective plans of instruction.

This original EPI was revised in 1978 and 1979 to more accurately reflect some of the computer oriented and various other electronic principles. The revision was accomplished by Mr. James L. Slovak, Inventory Development Specialist, and Captain Frederick B. Bower, Jr., Occupational Survey Analyst, after consultation with electronic principles instructors at each of the technical training centers. Following this extensive review, the EPI was reprinted in its current format.

Description

The EPI differs from the usual task oriented survey in two major respects. First, the EPI asks two general questions: "what do you do?" and what electronic knowledge do you use in performing your job?" The usual task survey concentrates on only one question: "what do you do?" The second difference is the EPI can be administered to anyone who works with electronics. That is, it is general in nature, unlike the usual job inventory which is aimed at a single specialty within a career field.

Administration

This Electronic Principles inventory was administered to personnel in the Aircraft Control and Warning (AC & W) Radar (AFS 303X2) career ladder during the period January through June 1980. Personnel were selected to participate in this survey so as to insure an accurate representation across all MAJCOMs and paygrade groups. Table 1 reflects the major command distribution of personnel assigned as of the fall of 1980 and the distribution of incumbents in the survey sample. The 478 members making up the final sample represent 47 percent of the 1,023 total assigned. Table 2 shows the paygrade distribution of the sample as compared to the assigned strength. Although the number of airmen sampled was quite low, the sampling in the E-4 through E-6 paygrades was very adequate and should accurately reflect the Electronic Principles characteristic of this career ladder.

TABLE 1

COMMAND REPRESENTATION OF SURVEY SAMPLE

MAJOR COMMAND	PERCENT ASSIGNED	PERCENT SAMPLED
TAC	58	64
USAFE	17	13
AFCC	13	14
ATC	4	5
PACAF	3	2
AFSC	2	1
OTHER	3	1
TOTAL	100	100

TOTAL 303X2 ASSIGNED - 1,023
TOTAL 303X2 SAMPLED - 478
PERCENT SAMPLED - 47%

TABLE 2

PAYGRADE DISTRIBUTION OF SURVEY SAMPLE

	PERCENT ASSIGNED	PERCENT SAMPLED
AIRMEN	14	0
E-4	16	36
E-5	36	34
E-6	20	21
E-7	14	8
NOT REPORTED	0	1
TOTAL	100	100

PRESENTATION OF RESULTS

Personnel responded "yes" or "no" to the 1,332 electronic principles questions as related to their present job. A Group Summary (GPSUM) computer printout is provided in the Appendix portion of this report. Page 1 of the GPSUM lists the six selected groups identified for this report. Pages 2-46 show the percentage of the incumbents responding to the EPI items. The computer program results display the percent members answering "yes" to the subject area questions. The reader can locate a specific subject area by referring to the Appendix page number as listed in Table 3. For example, the Transformers area results are given on pages 6-7 of the GPSUM. The percentage of survey respondents indicating use of specific electronic principles ranged from high in areas such as Meters/Multimeters (p. 3), Soldering (p. 10), and Oscilloscopes (p. 12) to low in areas such as Infrared (pp. 42-43), Lasers (pp. 43-44), and Display Tubes (p. 44-45).

TABLE 3

EPI SUBJECT AREAS

SEQUENCE OF SUBJECT AREAS	SUBJECT AREAS TITLE	BEGINNING ITEM NUMBER	GPSUM PAGE NUMBER
1	MATHEMATICS	A1	2
2	DIRECT CURRENT AND VOLTAGE	A16	2
3	RESISTORS/RESISTIVE CIRCUIT	A29	2
4	METER/MULTIMETER	B64	3
5	ALTERNATING CURRENT	B72	4
6	INDUCTORS/INDUCTIVE REACTANCE	B79	4
7	CAPACITORS AND CAPACITIVE	C104	5
8	TRANSFORMERS	C136	6
9	MAGNETISM	C176	7
10	RCL CIRCUITS	D188	7
11	TIME CONSTANTS	D234	9
12	FILTERS	D241	9
13	COUPLING	E257	10
14	SOLDERING	E268	10
15	RELAYS	E281	11
16	MICROPHONES AND SENSING DEVICES	F299	11
17	SPEAKERS	F313	12
18	OSCILLOSCOPES	F328	12
19	SEMICONDUCTOR DIODES	G346	12
20	TRANSISTORS	G388	14
21	TRANSISTOR AMPLIFIERS	G412	15
22	SOLID-STATE SPECIAL PURPOSE DEVICES	H458	17
23	POWER SUPPLIES	H472	18
24	OSCILLATORS	H502	19
25	MULTIVIBRATORS	I533	19
26	LIMITERS AND CLAMPERS	I548	20
27	ELECTRON TUBES	I558	20
28	ELECTRON TUBE AMPLIFIERS AND CIRCUITS	J597	21
29	SPECIAL PURPOSE ELECTRON TUBES	J604	22
30	HETERODYNING AND MODULATION-DE MODULATION (MODEMS)	J618	22
31	AM SYSTEMS	K625	22
32	FM SYSTEMS	K645	23
33	NUMBERING SYSTEMS	K667	24
34	LOGIC FUNCTIONS	L691	25
35	BOOLEAN EQUATIONS	L724	26
36	COUNTERS	L736	27
37	TIMING CIRCUITS	L758	27
38	USE OF SIGNAL GENERATORS	M770	28

TABLE 3 (CONTINUED)

EPI SUBJECT AREAS

SEQUENCE OF SUBJECT AREAS	SUBJECT AREAS TITLE	BEGINNING ITEM NUMBER	GPSUM PAGE NUMBER
39	MOTORS AND GENERATORS	M784	28
40	METER MOVEMENTS	N814	29
41	SATURABLE REACTORS AND MAGNETIC AMPLIFIERS	N826	29
42	WAVESHAPING CIRCUITS	N838	30
43	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS	0852	30
44	PULSE MODULATION SYSTEMS	0882	31
45	ANTENNAS	0922	33
46	TRANSMISSION LINES	P965	34
47	WAVEGUIDES AND CAVITY RESONATORS	P995	35
48	MICROWAVE AMPLIFIERS AND OSCILLATORS	P1038	37
49	REGISTERS	Q1115	39
50	STORAGE DEVICES	Q1122	40
51	DIGITAL TO ANALOG AND ANALOG TO DIGITAL CONVERTERS	Q1149	41
52	PHANTASTRONS	Q1165	41
53	SCHMITT TRIGGERS	Q1166	41
54	CABLE FABRICATION	R1169	41
55	INPUT/OUTPUT (PERIPHERAL) DEVICES	S1171	41
56	PHOTO SENSITIVE DEVICES	S1185	42
57	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)	S1186	42
58	INFRARED SYSTEMS	T1195	42
59	LASERS	T1223	43
60	DISPLAY TUBES	T1257	44
61	TELEVISION	T1273	45
62	PROGRAMMING	U1283	45
63	DB AND POWER RATIOS	U1327	46

APPENDIX A

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

TABULATION OF PERCENT MEMBERS RESPONDING 'YES' TO USE OF ELECTRONIC PRINCIPLES
BY 303X2 DAFSC/CONUS/O'SEAS GROUPS IN THE 303X1,2,3 EPI CAREER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP IDENTITY =	SPC014	ALL AMN DAFSC 303X2	CONTAINING 478 MEMBERS.
GROUP IDENTITY =	SPC016	ALL AMN DAFSC 30352	CONTAINING 272 MEMBERS.
GROUP IDENTITY =	SPC017	ALL AMN DAFSC 30372	CONTAINING 206 MEMBERS.
GROUP IDENTITY =	SPC022	ALL AMN DAFSC 30399	CONTAINING 12 MEMBERS.
GROUP IDENTITY =	SPC025	ALL AMN DAFSC 30352 IN CONUS	CONTAINING 65 MEMBERS.
GROUP IDENTITY =	SPC026	ALL AMN DAFSC 30352 OVERSEAS	CONTAINING 209 MEMBERS.

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/05 GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
A 1 1 MATH - USE INSTRUMENTS, IN WHICH IT IS NECESSARY TO AMPLIFY OR ATTENUATE READINGS BY POWERS OF 10	73	78	66	67	82	76	MATHEMATICS
A 2 1 MATH - USE PUBLICATIONS, IN WHICH IT IS NECESSARY TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE APPLYING THE INFORMATION	55	53	58	67	49	54	
A 3 1 MATH - REARRANGE AND SOLVE FORMULAS OR EQUATIONS	52	48	57	58	57	45	
A 4 1 MATH - CALCULATE THE SQUARE ROOT OF A QUANTITY	27	22	34	42	28	20	
A 5 1 MATH - SOLVE FOR UNKNOWN QUANTITIES	39	35	44	50	42	33	
A 6 1 MATH - CONVERT NUMBERS TO LOGARITHMS	22	18	28	58	23	16	
A 7 1 MATH - USE LOGARITHUM TABLES IN CALCULATIONS	29	26	34	58	31	24	
A 8 1 MATH - SOLVE QUADRATIC EQUATIONS	18	15	21	17	22	12	
A 9 1 MATH - USE THE NATURAL SYSTEM OF LOGARITHUMS	13	11	16	50	14	10	
A 10 1 MATH - PERFORM CALCULATIONS ON VECTOR QUANTITIES	20	17	25	42	23	14	
A 11 1 MATH - WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT	34	30	40	58	49	23	
A 12 1 MATH - DETERMINE AREAS OF PLANE FIGURES SUCH AS AREAS OF CIRCLES OR TRIANGLES	16	13	20	17	18	11	
A 13 1 MATH - SOLVE OR USE SIMULTANEOUS EQUATIONS	12	11	14	8	20	9	
A 14 1 MATH - SOLVE OR USE PROPORTIONS	38	39	38	58	46	36	
A 15 1 MATH - USE MATHEMATICAL EXPONENTS OR SUBSCRIPTS IN OTHER THAN POWERS OF 10	34	29	40	50	38	26	
A 16 2 DC - USE THE TERM VOLTAGE OR VOLT (V)	90	90	88	92	89	91	DIRECT CURRENT AND VOLTAGE
A 17 2 DC- USE THE TERM ELECTROMOTIVE FORCE (EMF)	45	43	48	67	54	41	
A 18 2 DC - USE THE TERM OHM	88	88	88	92	88	89	
A 19 2 DC - USE THE TERMS ION	38	38	38	42	52	33	
A 20 2 DC - USE THE TERM DYNE	15	17	13	25	20	17	
A 21 2 DC - USE THE TERM AMPERE	86	86	87	92	85	87	
A 22 2 DC - USE THE TERM NEUTRON	23	26	18	0	35	25	
A 23 2 DC - USE THE TERM COULOMB	24	25	23	0	35	23	
A 24 2 DC - USE THE TERM PROTON	24	27	19	8	38	24	
A 25 2 DC - USE THE TERM ELECTRON	74	73	76	83	77	72	
A 26 2 DC - USE THE TERM CURRENT	88	89	88	92	88	89	
A 27 2 DC - USE THE TERM WATTAGE	86	84	89	92	85	84	
A 28 2 DC - DETERMINE HOW BATTERIES MUST BE CONNECTED TOGETHER FOR A SPECIFIC VOLTAGE AND/OR CURRENT	35	35	36	75	45	32	
A 29 3 RESISTORS/RESISTIVE CIRCUITS - WORK WITH	65	66	63	67	63	66	RESISTORS/RESISTIVE CIRCUIT
A 30 3 RESISTORS - INSPECT	74	80	67	75	86	78	
A 31 3 RESISTORS - CLEAN	66	75	53	42	83	73	
A 32 3 RESISTORS - ADJUST	71	78	62	50	86	76	
A 33 3 RESISTORS - MEASURE	72	78	65	58	85	76	
A 34 3 RESISTORS - USE OR REFER TO TEMPERATURE COEFFICIENTS OF	32	32	32	67	38	30	
A 35 3 RESISTORS - USE OR REFER TO SYMBOLS FOR CARBON	56	56	56	92	69	53	
A 36 3 RESISTORS - USE OR REFER TO SYMBOLS FOR FIXED WIRE	64	67	60	92	77	65	
A 37 3 RESISTORS - USE OR REFER TO SYMBOLS FOR SLIDE TAP	55	59	49	67	71	56	
A 38 3 RESISTORS - USE OR REFER TO SYMBOLS FOR RHEOSTATS	70	74	64	83	74	75	
A 39 3 RESISTORS - USE OR REFER TO SYMBOLS FOR POTENTIOMETERS	76	80	70	92	85	79	
A 40 3 RESISTORS - USE OR REFER TO SYMBOLS FOR FIXED FILM	44	39	51	92	55	35	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
A 41 3 RESISTORS - USE COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE	76	81	70	92	85	90
A 42 3 RESISTORS - USE COLOR CODES WHICH INDICATE TOLERANCE	74	78	68	92	80	78
A 43 3 RESISTORS - USE COLOR CODES WHICH INDICATE FAILURE RATE	21	22	19	33	26	21
A 44 3 RESISTORS - USE OR REFER TO SCHEMATIC SYMBOLS WHICH REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	73	76	69	75	75	77
A 45 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL RESISTANCE IN	68	71	64	83	77	69
A 46 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL CURRENT IN	65	68	61	83	72	67
A 47 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	65	69	61	83	75	67
A 48 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO POWER DISSIPATION IN	55	57	53	75	68	55
A 49 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL RESISTANCE IN	66	69	63	83	74	67
A 50 3 RESISTIVE CIRCUITS - SERIES - USE OR REFER TO TOTAL CURRENT IN	62	65	59	83	69	64
A 51 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	62	64	59	75	74	61
A 52 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO INDIVIDUAL BRANCH CURRENTS IN	56	58	54	75	65	56
A 53 3 RESISTIVE CIRCUITS - SERIES PARALLEL - USE OR REFER TO POWER DISSIPATION IN	52	54	50	75	63	52
A 54 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO TOTAL RESISTANCE IN	67	69	65	75	78	67
A 55 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO TOTAL CURRENT IN	62	64	60	75	72	63
A 56 3 PARALLEL RESISTIVE CIRCUITS - USE OR REFER TO INDIVIDUAL VOLTAGE DROPS IN	62	65	58	75	74	63
A 57 3 RESISTIVE PARALLEL CIRCUITS - USE OR REFER TO INDIVIDUAL BRANCH CURRENTS IN	55	55	54	75	65	54
A 58 3 RESISTIVE PARALLEL CIRCUITS - USE OR REFER TO POWER DISSIPATION IN	51	52	50	67	62	51
A 59 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE TOTAL RESISTANCE FOR	62	63	60	67	74	60
A 60 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE TOTAL CURRENT FOR	57	59	53	67	66	57
A 61 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE INDIVIDUAL VOLTAGE DROPS FOR	56	59	53	67	68	56
A 62 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE INDIVIDUAL BRANCH CURRENTS FOR	50	51	50	67	62	48
A 63 3 SERIES RESISTIVE, SERIES PARALLEL RESISTIVE, OR PARALLEL RESISTIVE CIRCUITS - CALCULATE POWER DISSIPATION FOR	46	47	45	58	58	44
B 64 1 METERS/MULTIMETERS - USE TO MEASURE RESISTANCE	76	81	70	75	86	79
B 65 1 METERS/MULTIMETERS - USE TO MEASURE VOLTAGE	78	81	73	75	86	80

METERS/MULTIMETERS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		DY-TSK	ALL SPC Q14	5 SKL SPC Q16	7 SKL SPC C17	9 SKL SPC Q22	5 US SPC Q25	5 O's SPC Q26	
B	66	1 METERS/MULTIMETERS - USE TO MEASURE CURRENT	72	76	67	75	82	75	
B	67	1 METERS/MULITMETERS - USE TO MEASURE POWER	73	76	70	75	83	74	
B	68	1 METERS/MULTIMETERS - USE TO MEASURE FREQUENCY	71	74	67	75	83	72	
B	69	1 METERS/MULTIMETERS - USE TO MEASURE TEMPERATURE	49	51	46	33	65	47	
B	70	1 METERS/MULTIMETERS - USE TO MEASURE PRESSURE	56	59	51	17	75	55	
B	71	1 METERS/MULTIMETERS - USE TO MEASURE LIGHT LEVELS	6	8	4	0	15	5	
B	72	2 AC - USE OR REFER TO EFFECTIVE VOLTAGE (RMS)	68	65	71	83	75	63	ALTERNATING CURRENT
B	73	2 AC - USE OR REFER TO PEAK TO PEAK VOLTAGE	78	79	77	92	86	77	
B	74	2 AC - USE OR REFER TO AVERAGE VOLTAGE (DC)	73	73	72	75	85	70	
B	75	2 AC - USE OR REFER TO WAVE LENGTH	61	64	57	58	74	61	
B	76	2 AC - USE OR REFER TO FREQUENCY	81	80	82	83	85	79	
B	77	2 AC - USE OR REFER TO INSTANTANEOUS VALUE	34	33	35	50	46	30	
B	78	2 AC - USE OR REFER TO PHASE RELATIONSHIPS	70	71	68	75	80	69	
B	79	3 INDUCTORS/INDUCTIVE REACTANCE- WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, OR CHOKE COILS	60	64	56	42	58	65	INDUCTORS/INDUCTIVE REACTANCE
B	80	3 INDUCTORS/INDUCTIVE REACTANCE - INSPECT INDUCTORS	67	72	62	75	82	69	
B	81	3 INDUCTORS/INDUCTIVE REACTANCE - CLEAN INDUCTORS	61	69	50	42	82	66	
B	82	3 INDUCTORS/INDUCTIVE REACTANCE - ADJUST INDUCTORS	59	66	49	33	72	65	
B	83	3 INDUCTORS/INDUCTIVE REACTANCE - MEASURE INDUCTORS	47	53	38	33	71	48	
B	84	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO INDUCTANCE	64	68	59	42	77	66	
B	85	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO HENRIES	52	56	47	42	58	56	
B	86	3 INDUCTANCE/INDUCTIVE REACTANCE - USE OR REFER TO INDUCTIVE REACTANCE	51	56	46	67	66	54	
B	87	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO COPPER LOSS IN INDUCTORS	12	11	14	8	29	7	
B	88	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS	15	12	19	8	23	8	
B	89	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS	15	13	19	8	25	9	
B	90	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF TURNS OF THE COIL	16	16	16	0	26	13	
B	91	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE CORE	14	13	15	0	20	11	
B	92	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS LENGTH	12	12	13	0	15	11	
B	93	3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE PERMEABILITY OF THE CORE MATERIAL	15	14	16	0	17	13	
B	94	3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS	13	13	14	8	17	12	
B	95	3 INDUCTORS/INDUCTIVE - CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE IN SERIES	17	16	19	8	23	14	
B	96	3 INDUCTORS/INDUCTIVE REACTANCE - CALACULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL	18	17	20	8	25	14	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O'S SPC 026
B 97 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS	18	17	20	8	25	14
B 98 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS	36	31	43	25	42	29
B 99 3 INDUCTORS/INDUCTIVE REACTANCE - CALCULATE INDUCTIVE REACTANCE	22	21	25	33	28	19
B 100 3 INDUCTORS/INDUCTIVE REACTANCE - USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY	28	25	33	25	37	22
B 101 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH POWER INDUCTORS	45	46	45	50	54	44
B 102 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH AUDIO FREQUENCY INDUCTORS	15	13	19	33	14	12
B 103 3 INDUCTORS/INDUCTIVE REACTANCE - WORK WITH RADIO FREQUENCY INDUCTORS	54	54	53	67	63	52
C 104 1 CAPACITORS - WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS	70	74	65	67	77	72
C 105 1 CAPACITORS - INSPECT	70	76	62	83	83	74
C 106 1 CAPACITORS - CLEAN	63	72	50	42	83	69
C 107 1 CAPACITORS - ADJUST	63	69	55	33	74	69
C 108 1 CAPACITORS - TEST	60	66	53	33	75	64
C 109 1 CAPACITORS - DISCHARGE	65	72	57	42	83	69
C 110 1 CAPACITORS - MEASURE	49	54	43	50	68	50
C 111 1 CAPACITANCE - USE OR REFER TO DISTRIBUTED CAPACITANCE	20	18	22	25	31	14
C 112 1 CAPACITANCE - USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC	5	6	5	8	11	5
C 113 1 CAPACITANCE - USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS	70	74	66	75	77	73
C 114 1 CAPACITANCE - USE OR REFER TO	69	71	66	83	77	69
C 115 1 CAPACITANCE - USE OR REFER TO DIELECTRIC CONSTANT	23	22	24	17	34	20
C 116 1 CAPACITANCE - USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	62	61	63	75	68	59
C 117 1 CAPACITANCE - USE OR REFER TO CAPACITIVE REACTANCE	44	44	43	50	55	41
C 118 1 CAPACITANCE - USE OR REFER TO CAPACITOR COLOR CODES	42	39	47	67	40	39
C 119 1 CAPACITANCE - WORK WITH CAPACITORS IN DC CIRCUITS	73	77	67	67	83	76
C 120 1 CAPACITANCE - WORK WITH CAPACITORS IN AC CIRCUITS	71	75	67	67	82	74
C 121 1 CAPACITANCE - WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	71	75	67	75	83	73
C 122 1 CAPACITANCE - CALCULATE FOR PARTICULAR CAPACITORS USING FORMULAS	17	17	16	17	28	15
C 123 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE DIELECTRIC CONSTANT	14	14	15	8	23	12
C 124 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO THE DIELECTRIC THICKNESS	14	13	15	8	23	11
C 125 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	28	25	33	50	34	22

CAPACITORS AND CAPACITIVE REACTANCE

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
C 126 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	29	26	34	50	35	23
C 127 1 CAPACITANCE - CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	24	23	26	33	31	22
C 128 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CURRENT DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO	41	41	40	50	48	41
C 129 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	32	29	36	25	38	28
C 130 1 CAPACITANCE - USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO FREQUENCY	29	27	33	25	35	25
C 131 1 CAPACITANCE - CALCULATE CAPACITIVE REACTANCE	19	18	20	33	28	15
C 132 1 CAPACITANCE - WORK WITH VARIABLE CAPACITORS	69	73	63	58	75	72
C 133 1 CAPACITANCE - WORK WITH TRIMMER CAPACITORS	57	56	57	58	58	56
C 134 1 CAPACITANCE - WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	72	76	66	67	82	75
C 135 1 CAPACITANCE - WORK WITH OTHER FIXED CAPACITORS	70	74	66	67	78	73
C 136 2 TRANSFORMERS - WORK WITH	65	70	59	75	71	69
C 137 2 TRANSFORMERS - INSPECT	69	74	62	83	78	72
C 138 2 TRANSFORMERS - CLEAN	62	71	50	33	80	68
C 139 2 TRANSFORMERS - ADJUST	52	56	46	17	65	54
C 140 2 TRANSFORMERS - TROUBLESHOOT	61	67	53	42	75	65
C 141 2 TRANSFORMERS - DISTINGUISH BETWEEN MUTUAL INDUCTION AND MUTUAL INDCTANCE (M)	9	9	8	0	14	9
C 142 2 TRANSFORMERS - USE THE SYMBOL FOR MUTUAL INDUCTANCE (M)	10	10	9	0	12	11
C 143 2 TRANSFORMERS - REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH	16	17	15	8	22	16
C 144 2 TRANSFORMERS - CALCULATE TURNS RATIOS USING CURRENT OR VOLTAGE RATIOS	19	19	19	17	20	20
C 145 2 TRANSFORMERS - REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH	27	25	29	25	25	26
C 146 2 TRANSFORMERS - CALCULATE IMPEDANCE INTERACTIONS FOR	10	10	10	8	14	10
C 147 2 TRANSFORMERS - WORK WITH AUTOTRANSFORMERS	45	44	45	58	43	45
C 148 2 TRANSFORMERS - WORK WITH POWER	68	74	61	67	80	72
C 149 2 TRANSFORMERS - WORK WITH AUDIO	19	16	23	42	15	18
C 150 2 TRANSFORMERS - WORK WITH RADIO FREQUENCY	56	55	58	75	58	55
C 151 2 TRANSFORMERS - WORK WITH SATURABLE CORE	46	46	45	58	48	46
C 152 2 TRANSFORMERS - CHECK FOR OPEN WINDOWS BY MEASURING RESISTANCE	65	70	59	42	80	67
C 153 2 TRANSFORMERS - CHECK FOR SHORTED WINDINGS BY MEASURING RESISTANCE	63	68	56	33	77	65
C 154 2 TRANSFORMERS - CHECK FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	56	60	52	33	74	55
C 155 2 TRANSFORMERS - MEASURE RESISTANCE OF WINDINGS TO DETERMINE STEP-UP OR STEP-DOWN TURNS RATIO	28	31	25	25	40	29
C 156 2 TRANSFORMERS - MEASURE OUTPUT VOLTAGE TO DETERMINE STEP-UP OR STEP-DOWN TURNS RATIO	42	43	41	42	55	39

TRANSFORMERS

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O'S SPC 026	
C 157 2 TRANSFORMERS - REFER TO BASIC SYMBOLS	71	75	67	83	76	75	
C 158 2 TRANSFORMERS - REFER TO MULTIPLE SECONDARY-WINDINGS SYMBOLS	67	69	63	83	72	69	
C 159 2 TRANSFORMERS - REFER TO MULTIPLE TAP SYMBOLS	69	73	65	75	77	72	
C 160 2 TRANSFORMERS - REFER TO CENTER TAP SYMBOLS FOR	70	73	65	83	77	73	
C 161 2 TRANSFORMERS - REFER TO AIR CORE SYMBOLS FOR	38	35	44	83	42	33	
C 162 2 TRANSFORMERS - REFER TO IRON CORE SYMBOLS FOR	44	40	50	83	46	40	
C 163 2 TRANSFORMERS - REFER TO VARIABLE TRANSFORMER SYMBOLS FOR	62	64	59	75	68	63	
C 164 2 TRANSFORMERS - REFER TO A COMBINATION OF SYMBOLS FOR	59	60	57	83	62	61	
C 165 2 TRANSFORMERS - DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES USING SCHEMATIC SYMBOLS	47	46	48	50	54	44	
C 166 2 TRANSFORMERS - DETERMINE OR REFER TO THE TYPE OF CORE	27	24	32	17	29	22	
C 167 2 TRANSFORMERS - REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO IS EQUAL TO THE VOLTAGE RATIO	32	30	33	33	40	28	
C 168 2 TRANSFORMERS - USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS	54	56	52	58	65	53	
C 169 2 TRANSFORMERS - CALCULATE VOLTAGE RATIOS USING TURNS RATIOS	22	22	22	8	32	20	
C 170 2 TRANSFORMERS - CALCULATE CURRENT RATIOS USING TURNS RATIOS	16	16	16	0	26	14	
C 171 2 TRANSFORMERS - USE THREE PHASE	58	60	54	75	68	59	
C 172 2 TRANSFORMERS - INSPECT THREE PHASE	55	56	54	83	66	54	
C 173 2 TRANSFORMERS - CLEAN OR LUBRICATE THREE PHASE	45	49	40	33	55	47	
C 174 2 TRANSFORMERS - ADJUST THREE PHASE	38	39	36	17	43	38	
C 175 2 TRANSFORMERS - TROUBLESHOOT THREE PHASE	47	49	44	42	65	44	
C 176 3 MAGNETISM - USE OR REFER TO PERMANENT MAGNETS	47	48	46	50	55	47	MAGNETISM
C 177 3 MAGNETISM - USE OR REFER TEMPORARY MAGNETS	30	28	33	8	34	26	
C 178 3 MAGNETISM - USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	15	14	16	0	14	15	
C 179 3 MAGNETISM - USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	12	10	14	0	12	10	
C 180 3 MAGNETISM - USE OR REFER TO PERMEABILITY OF MAGENTIC MATERIALS	14	14	14	0	15	14	
C 181 3 MAGNETISM - USE OR REFER TO RESIDUAL MAGNETISM	19	18	21	0	17	19	
C 182 3 MAGNETISM - USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	31	30	33	17	32	30	
C 183 3 MAGNETISM - USE OR REFER TO WEBER'S THEORY OF	9	10	9	0	12	10	
C 184 3 MAGNETISM - USE OR REFER TO DOMAIN THEORY OF	10	11	8	0	11	11	
C 185 3 MAGNETISM - USE OR REFER TO MAGNETIC INDUCTION	28	28	29	17	32	28	
C 186 3 MAGNETISM - USE OR REFER TO FLUX DENSITY	22	22	22	17	22	22	
C 187 3 MAGNETISM - USE OR REFER TO SATURABLE REACTANCE	34	32	36	33	35	33	
D 188 1 RCL CIRCUITS - WORK WITH RC, LR, OR RCL CIRCUITS	58	62	53	50	74	58	RCL CIRCUITS
D 189 1 RCL CIRCUITS - USE OR REFER TO VECTORS WHEN WORKING WITH	14	13	15	17	18	11	
D 190 1 RCL CIRCUITS - USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH	12	11	14	0	12	11	
D 191 1 RCL CIRCUITS - USE OR REFER TO SINE WHEN WORKING WITH	22	21	23	33	31	18	
D 192 1 RCL CIRCUITS - USE OR REFER TO COSINE WHEN WORKING WITH	21	20	22	33	31	16	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 LS SPC 025	5 O's SPC 026
D 193 1 RCL CIRCUITS - USE OR REFER TO TANGENT WHEN WORKING WITH	18	17	19	33	26	13
D 194 1 RCL CIRCUITS - USE OR REFER TO WATTS WHEN WORKING WITH	43	46	39	42	49	45
D 195 1 RCL CIRCUITS - USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH	25	27	22	17	29	27
D 196 1 RCL CIRCUITS - USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH	33	35	32	25	40	33
D 197 1 RCL CIRCUITS - USE OR REFER TO AVERAGE POWER (P AVE) WHEN WORKING WITH	43	45	39	25	49	44
D 198 1 RCL CIRCUITS - USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH	21	22	21	25	22	22
D 199 1 RCL CIRCUITS - USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH	23	22	24	17	28	21
D 200 1 RCL CIRCUITS - USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH	48	47	48	33	55	46
D 201 1 RCL CIRCUITS - USE OR REFER TO BANDWIDTH WHEN WORKING WITH	56	58	54	17	65	56
D 202 1 RCL CIRCUITS - USE OR REFER TO SELECTIVITY WHEN WORKING WITH	41	42	40	17	51	41
D 203 1 RCL CIRCUITS - USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH	50	51	49	25	57	51
D 204 1 RCL CIRCUITS - USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH	53	54	52	33	60	53
D 205 1 RCL CIRCUITS - USE OR REFER TO BANDPASS REGION WHEN WORKING WITH	48	49	46	17	52	49
D 206 1 RCL CIRCUITS - USE OR REFER TO CIRCUIT Q WHEN WORKING WITH	26	27	24	0	28	28
D 207 1 RCL CIRCUITS - USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH	47	48	47	25	54	47
D 208 1 RCL CIRCUITS - DETERMINE VALUES OF TRIGONMETRIC FUNCTIONS USING FORMULAS	16	11	21	33	18	9
D 209 1 RCL CIRCUITS - DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	11	9	14	0	9	9
D 210 1 RCL CIRCUITS - USE OR REFER TO TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	25	25	26	0	28	25
D 211 1 RCL CIRCUITS - USE OR REFER TO PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	12	10	16	8	11	10
D 212 1 RCL CIRCUITS - USE OR REFER TO TOTAL IMPEDANCE FOR SERIES	29	29	30	8	29	30
D 213 1 RCL CIRCUITS - USE OR REFER TO IMPEDANCE ANGLES FOR SERIES	11	10	13	0	11	11
D 214 1 RCL CIRCUITS - USE OR REFER TO APPARENT POWER (PA) FOR SERIES	14	14	15	8	17	13
D 215 1 RCL CIRCUITS - USE OR REFER TO TRUE POWER (PT) FOR SERIES	18	19	17	25	25	17
D 216 1 RCL CIRCUITS - USE OR REFER TO POWER FACTORS (PF) FOR SERIES	17	17	18	0	20	16
D 217 1 RCL CIRCUITS - USE OR REFER TO TOTAL CURRENT FOR PARALLEL	30	29	31	25	28	30
D 218 1 RCL CIRCUITS - USE OR REFER TO IMPEDANCE ANGLES FOR PARALLEL	10	10	10	8	12	10

PCT MBRS RESP 'YES'- 3D3X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O'S SPC 026	
D 219 1 RCL CIRCUITS - USE THE ASSUMED VOLTAGE METHOD FOR DETERMING TOTAL IMPEDANCE FOR PARALLEL	10	9	11	8	12	9	
D 220 1 RCL CIRCUITS - USE OHM'S LAW FOR DETERMING TOTAL IMPEDANCE FOR PARALLEL	32	29	36	25	29	30	
D 221 1 RCL CIRCUITS - CHECK CAPACITORS USING OHMMETERS	55	59	50	33	68	57	
D 222 1 RCL CIRCUITS - CHECK CAPACITORS USING SUBSTITUTION	43	44	41	17	55	42	
D 223 1 RCL CIRCUITS - CHECK INDUCTORS USING OHMMETERS	54	58	50	33	69	55	
D 224 1 RCL CIRCUITS - CHECK INDUCTORS USING SUBSTITIUTION	41	42	40	17	48	41	
D 225 1 RCL CIRCUITS - CHECK RESISTORS USING OHMMETERS	60	65	53	67	77	62	
D 226 1 RCL CIRCUITS - CHECK RESISTORS USING SUBSTITUTION	36	38	33	25	45	37	
D 227 1 RCL CIRCUITS - USE OR REFER TO THE RULE THAT PHASE ANGLE (THETA) = 0, POWER FACTOR (PF) = 1, AND APPARENT POWER (PA) = TRUE POWER (PT) FOR RESONANT CIRCUITS	9	9	8	8	9	9	
D 228 1 RCL CIRCUITS - USE OR REFER TO RESONANT FREQUENCIES FOR	39	38	41	33	42	37	
D 229 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY	32	32	33	17	37	31	
D 230 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL	27	24	32	8	26	23	
D 231 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 OF THE PEAK CURRENT VALUE	50	51	49	58	60	50	
D 232 1 RCL CIRCUITS - USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO THE QUALITY OF THE THE COIL (Q)	18	19	18	8	23	18	
D 233 1 RCL CIRCUIT - DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES	21	21	22	8	25	21	
D 234 2 TIME CONTANTS - WORK WITH, USE, OR REFER TO	41	40	41	42	43	40	TIME CONSTANTS
D 235 2 TIME CONTANTS - USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED OR (DISCHARGED) AFTER FIVE (5)	27	28	26	42	34	26	
D 236 2 TIME CONSTANTS - USE OR REFER TO UNVIERSAL CHARTS FOR	13	15	11	33	15	15	
D 237 2 TIME CONSTANTS - USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS	18	18	17	8	25	17	
D 238 2 TIME CONSTANTS - USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS	19	18	20	8	25	17	
D 239 2 TIME CONSTANTS - USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES	18	18	17	0	22	17	
D 240 2 TIME CONSTANTS - USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE	17	15	20	17	17	15	
D 241 3 FILTER CIRCUITS - WORK WITH	59	64	52	58	63	65	FILTERS
D 242 3 FILTER CIRCUITS - INSPECT	59	62	54	67	66	62	

A10

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
D 243 3 FILTER CIRCUITS - CLEAN	55	60	48	17	63	60	
D 244 3 FILTER CIRCUITS - ALIGN OR ADJUST	48	54	40	17	60	53	
D 245 3 FILTER CIRCUITS - TROUBLESHOOT TO	49	53	44	25	58	52	
D 246 3 FILTER CIRCUITS - TROUBLESHOOT TO COMPONENT PARTS OF	53	57	47	25	65	56	
D 247 3 FILTER CIRCUITS - WORK WITH LOW PASS FILTERS	53	54	51	50	55	55	
D 248 3 FILTER CIRCUITS - WORK WITH HIGH PASS FILTERS	51	52	49	50	55	52	
D 249 3 FILTER CIRCUITS - WORK WITH BANDPASS FILTERS	56	58	52	50	63	57	
D 250 3 FILTER CIRCUITS - WORK WITH BAND-REJECT FILTERS	39	40	37	50	45	39	
D 251 3 FILTER CIRCUITS - DON'T REMEMBER WHICH TYPE OF	13	17	9	0	25	15	
D 252 3 FILTER CIRCUITS - WORK WITH L-SECTION	46	44	49	50	52	43	
D 253 3 FILTER CIRCUITS - WORK WITH T-SECTION	42	41	45	50	45	41	
D 254 3 FILTER CIRCUITS - WORK WITH PI-SECTION	45	42	48	50	49	41	
D 255 3 FILTER CIRCUITS - WORK WITH YTTRIUM IRON GARNET (YIG) FILTERS	19	18	20	8	46	10	
D 256 3 FILTER CIRCUITS - USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS	14	15	12	8	17	14	
E 257 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH	59	62	55	58	71	59	COUPLING
E 258 1 COUPLING DEVICES CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY COMPONENTS ASSOCIATED WITH RC COUPLING	58	60	55	58	65	60	
E 259 1 COUPLING DEVICES OR CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY AND COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING	57	61	52	58	68	60	
E 260 1 COUPLING DEVICE OR CIRCUITRY - IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING	58	61	54	58	68	60	
E 261 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THE RC COUPLING	53	58	46	42	68	56	
E 262 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	53	59	44	42	71	56	
E 263 1 COUPLING DEVICES OR CIRCUITRY - TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	54	59	46	42	69	57	
E 264 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH DIRECT COUPLED CIRCUITS	57	60	53	50	68	58	
E 265 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH CAPACITIVE-RESISTANCE COUPLED CIRCUITS	56	59	53	50	63	58	
E 266 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	54	56	51	50	62	55	
E 267 1 COUPLING DEVICES OR CIRCUITRY - WORK WITH TRANSFORMER COUPLED CIRCUITS	58	61	54	50	69	59	
E 268 2 SOLDERING - PERFORM, INSPECT OR EVALUATE CONNECTIONS	71	75	66	67	74	75	
E 269 2 SOLDERING - SOLDER CONNECTIONS	68	77	55	33	80	77	SOLDERING
E 270 2 SOLDERING - DESOLDER CONNECTIONS	67	76	55	33	80	75	
E 271 2 SOLDERING - PERFORM HIGH RELIABILITY	52	61	40	25	65	60	
E 272 2 SOLDERING - INSPECT CONNECTIONS	74	79	68	92	80	79	
E 273 2 SOLDERING - CLEAN OR TIN CONNECTIONS	67	77	54	33	80	76	

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC C16	7 SKL SPC C17	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
E 274 2 SOLDERING - MAKE HARDWIRE CONNECTIONS	65	73	54	33	78	71	
E 275 2 SOLDERING - MAKE PRINTED CIRCUIT BOARD CONNECTIONS	59	66	50	25	82	62	
E 276 2 SOLDERING - SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS	67	77	55	33	82	76	
E 277 2 SOLDERING - SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS	63	71	53	25	83	68	
E 278 2 SOLDERING - PERFORM WIRE WRAPPING IN LIEU OF	26	33	17	8	45	30	
E 279 2 SOLDERING - PERFORM CRIMPING IN LIEU OF	57	64	47	33	71	63	
E 280 2 SOLDERING - PERFORM WIRE CONNECTIONS USING A 714 PUNCH-ON TOOL IN LIEU OF	12	13	10	0	25	9	
E 281 3 RELAYS - WORK WITH	71	77	64	75	78	77	RELAYS
E 282 3 RELAYS - ADJUST	46	49	41	25	52	49	
E 283 3 RELAYS - CLEAN	58	67	45	33	72	66	
E 284 3 RELAYS - INSPECT	66	73	56	75	78	71	
E 285 3 RELAYS - TROUBLESHOOT	63	71	52	42	78	68	
E 286 3 RELAYS - MONITOR BIAS OUTPUT	24	32	14	17	37	30	
E 287 3 RELAYS - REMOVE OR REPLACE	64	73	51	25	78	72	
E 288 3 RELAYS - PERFORM TASKS ON CONTACTS	51	58	41	33	71	56	
E 289 3 RELAYS - PERFORM TASKS ON CORES	16	18	14	8	26	16	
E 290 3 RELAYS - PERFORM TASKS ON COILS	23	24	23	17	32	22	
E 291 3 RELAYS - PERFORM TASKS ARMATURES	29	32	25	25	35	32	
E 292 3 RELAYS - PERFORM ON SPRINGS	33	38	27	25	42	38	
E 293 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO)	61	64	56	75	74	62	
E 294 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC)	61	64	56	75	75	61	
E 295 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR SINGLE POLE, DOUBLE THROW (SPDT)	59	61	55	75	68	60	
E 296 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR DOUBLE POLE, DOUBLE THRWO (DPDT)	58	61	55	75	66	60	
E 297 3 RELAYS - USE OR REFER TO SCHEMATIC SYMBOLS FOR OTHER RELAY SYMBOLS	58	59	57	75	58	60	
E 298 3 RELAYS - CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	62	68	55	50	72	67	
F 299 1 MICROPHONES - PERFORM TASKS DEALING WITH MICROPHONES OR OTHER SENSING DEVICES SUCH AS TRANSDUCERS	11	9	14	42	3	11	MICROPHONES AND SENSING DEVICE
F 300 1 MICROPHONES - INSPECT	6	6	8	33	2	7	
F 301 1 MICROPHONES - CLEAN	5	5	4	8	2	6	
F 302 1 MICROPHONES - OPERATE	8	7	9	8	3	8	
F 303 1 MICROPHONES - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT NOT DOWN TO PARTS	5	5	5	17	2	6	
F 304 1 MICROPHONES - TROUBLESHOOT DOWN TO PARTS	2	2	2	8	2	2	
F 305 1 MICROPHONES - REMOVE OR REPLACE	5	5	4	8	2	6	
F 306 1 MICROPHONES - REMOVE OR REPLACE PARTS	3	2	3	8	2	2	
F 307 1 MICROPHONES - PERFORM TASKS ON CARBON	4	4	4	8	2	5	
F 308 1 MICROPHONES - PERFORM TASKS ON CAPACITOR	1	1	1	0	2	1	
F 309 1 MICROPHONES - PERFORM TASKS ON CRYSTAL	1	1	1	0	2	1	

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
F 310 1 MICROPHONE - PERFORM TASKS ON DYNAMIC	4	3	4	17	3	3	
F 311 1 MICROPHONE - PERFORM TASKS ON VELOCITY RIBBON	1	1	0	0	2	1	
F 312 1 MICROPHONE - PERFORM TAKS ON TRANSDUCERS	5	4	7	17	3	4	
F 313 2 SPEAKERS - PERFORM TASKS DEALING WITH	8	8	9	25	5	9	SPEAKERS
F 314 2 SPEAKERS - INSPECT	6	5	8	25	5	5	
F 315 2 SPEAKERS - CLEAN	5	4	5	0	5	4	
F 316 2 SPEAKERS - OPERATE	7	6	7	8	6	6	
F 317 2 SPEAKERS - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT NOT DOWN TO PARTS	6	6	7	8	5	7	
F 318 2 SPEAKERS - TROUBELSHOOT DOWN TO PARTS	3	2	3	0	3	2	
F 319 2 SPEAKERS - REMOVE OR REPLACE COMPLETE	6	6	6	0	5	6	
F 320 2 SPEAKERS - REMOVE OR REPLACE PARTS	2	2	1	0	3	2	
F 321 2 SPEAKERS - PERFORM TASKS ON CONES	1	1	1	0	2	1	
F 322 2 SPEAKERS - PERFORM TASKS ON SPIDERS	1	1	0	0	2	1	
F 323 2 SPEAKERS - PERFORM TASKS ON FIELD COILS	1	1	0	0	2	1	
F 324 2 SPEAKERS - PERFORM TASKS ON VOICE COILS	1	1	0	0	2	1	
F 325 2 SPEAKERS - PERFORM TASKS ON PERMANENT MAGNETS	1	1	0	0	2	1	
F 326 2 SPEAKERS - PERFORM TASKS ON ELECTROMAGNETS	1	1	0	0	2	1	
F 327 2 SPEAKERS - PERFORM TASKS ON SOFT IRON CORES	1	1	0	0	2	1	
F 328 3 OSCILLOSCOPES - USE	78	82	72	58	83	82	OSCILLOSCOPES
F 329 3 OSCILLOSCOPES - USE TO PERFORM OPERATIONAL CHECKS	76	81	69	58	82	81	
F 330 3 OSCILLOSCOPES - USE TO PERFORM ALGINMENTS OR ADJUSTMENTS	68	74	60	42	77	73	
F 331 3 OSCILLOSCOPES - USE TO TROUBLESHOOT ELECTRONIC CIRCUITS	67	73	58	42	77	71	
F 332 3 OSCILLOSCOPES - USE TO MEASURE FREQUENCY	71	75	66	50	80	74	
F 333 3 OSCILLOSCOPES - USE TO MEASURE TIME	77	82	71	67	82	82	
F 334 3 OSCILLOSCOPES - USE TO OBSERVE LISSAJOUS PATTERNS	28	30	26	42	37	27	
F 335 3 OSCILLOSCOPES - USE TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	74	78	68	67	82	77	
F 336 3 OSCILLOSCOPES - USE TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	72	76	67	58	80	75	
F 337 3 OSCILLOSCOPES - USE TO MEASURE AC VOLTAGE	74	79	68	67	80	75	
F 338 3 OSCILLOSCOPES - USE TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	70	72	67	58	75	71	
F 339 3 OSCILLOSCOPES - USE TO MEASURE DC VOLTAGE	74	79	67	67	82	78	
F 340 3 OSCILLOSCOPES - USE TO OBSERVE DATA PATTERNS	60	63	57	67	68	61	
F 341 3 OSCILLOSCOPES - USE TO MEASURE RIPPLE VOLTAGE	72	76	66	67	80	76	
F 342 3 OSCILLOSCOPES - USE TO MEASURE PHASE JITTER	56	60	51	58	66	58	
F 343 3 OSCILLOSCOPES - USE TO DISPLAY SWEEP GENERATOR PATTERNS	64	68	59	58	69	68	
F 344 3 OSCILLOSCOPES - USE TO OBSERVE PHASE RELATIONSHIPS	66	71	60	67	74	69	
F 345 3 OSCILLOSCOPES - USE TO OBSERVE SAMPLING DISPLAYS	60	64	55	58	66	64	
G 346 1 SEMICONDUCTOR DIODES - WORK WITH	71	74	66	67	82	72	SEMICONDUCTOR DIODES
G 347 1 SEMICONDUCTOR DIODES - INSPECT	67	72	60	67	77	71	
G 348 1 SEMICONDUCTOR DIODES - CHECK	64	73	53	42	80	71	
G 349 1 SEMICONDUCTOR DIODES - USE ENERGY LEVEL DIAGRAMS	7	6	8	8	9	5	
G 350 1 SEMICONDUCTOR DIODE - USE PN JUNCTION CHARACTERSITIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, TO COMPUTE FORWARD OR REVERSE BIAS RESISTANCE	14	15	12	0	[illegible]	12	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O'S SPC 026
G 351 1 SEMICONDUCTOR DIODES - COMPUTE FORWARD OR REVERSE BIAS RESISTANCE	22	24	18	17	32	22
G 352 1 SEMICONDUCTOR DIODES - USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT OPERATION OF	54	53	54	67	60	52
G 353 1 SEMICONDUCTOR DIODES - IDENTIFY AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON THEIR PHYSICAL APPEARANCE	64	68	60	67	74	67
G 354 1 SEMICONDUCTOR DIODES - REFER TO OR DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	15	14	16	8	18	12
G 355 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF MEASUREMENTS OF FORWARD BIAS RESISTANCE TO PERFORM JOB	54	55	52	58	62	54
G 356 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF DIODE COLOR CODING TO PERFORM JOB	29	25	33	58	37	22
G 357 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DIODE NUMBERING SYSTEM TO PERFORM JOB	55	58	50	58	71	55
G 358 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF MEASUREMENTS OF REVERSE BIAS RESISTANCE TO PERFORM JOB	52	51	53	58	55	50
G 359 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL) TO PERFORM JOB	11	10	12	8	17	8
G 360 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE END TO PERFORM JOB	68	72	63	67	77	71
G 361 1 SEMICONDUCTOR DIODE - NEED AN UNDERSTANDING OF DIRECTION OF CURRENT FLOW THROUGH A DIODE TO PERFORM JOB	66	69	62	67	75	67
G 362 1 SEMICONDUCTOR DIODE - NEED TO KNOW MATERIALS USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	20	19	20	17	20	20
G 363 1 SEMICONDUCTOR DIODES - NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE	38	37	40	50	43	35
G 364 1 SEMICONDUCTOR DIODES - USE OR REFER TO PN JUNCTION DIODE CHARACTERISTICS CURVES	15	13	17	0	15	12
G 365 1 SEMICONDUCTOR DIODES - DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED FROM CIRCUIT DIAGRAMS	51	52	50	50	63	49
G 366 1 SEMICONDUCTOR DIODES - NEED UNDERSTANDING OF VALENCE BAND	12	13	11	17	14	11
G 367 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF FORBIDDEN BAND	9	9	10	8	9	9
G 368 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF CONDUCTION BAND	12	11	14	8	12	11
G 369 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF CONVALENT BONDING	12	12	12	8	14	11
G 370 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ELECTRON-HOLE PAIR CREATED	15	15	15	8	18	13
G 371 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ELECTRON FLOW OR HOLE FLOW	28	28	29	25	29	28
G 372 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DONOR IMPURITY	13	12	14	8	18	11
G 373 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF ACCEPTOR IMPURITY	12	11	14	8	15	10

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
G 374 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF P-TYPE MATERIAL	33	33	33	33	46	29	
G 375 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF N-TYPE MATERIAL	33	33	33	33	46	29	
G 376 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF MAJORITY CARRIERS	15	15	16	8	20	14	
G 377 1 SEMICONDUCTORS DIODES - NEED AN UNDERSTANDING OF MINORITY CARRIERS	15	15	15	8	20	13	
G 378 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF JUNCTION RECOMBINATION	12	12	11	8	20	11	
G 379 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF DEPLETION REGION	16	15	18	8	22	13	
G 380 1 SEMICONDUCTOR DIODES - NEED AN UNDERSTANDING OF RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	16	15	18	8	18	14	
G 381 1 SEMICONDUCTOR DIODES - USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO	56	54	59	67	62	52	
G 382 1 SEMICONDUCTOR DIODES - USE OR REFER TO BARRIER HEIGHT	7	8	6	0	11	8	
G 383 1 SEMICONDUCTOR DIODES - USE OR REFER TO DIODE SUBSTITUTION INFORMATION	48	46	51	58	58	43	
G 384 1 SEMICONDUCTOR DIODES - USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT	30	28	33	25	32	28	
G 385 1 SEMICONDUCTOR DIODES - USE OR REFER TO PEAK RECURRENT FORWARD CURRENT	26	25	27	25	29	25	
G 386 1 SEMICONDUCTOR DIODES - USE OR REFER TO MAXIMUM SURGE CURRE	29	29	31	33	35	28	
G 387 1 SEMICONDUCTOR DIODES - USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	38	34	44	33	43	33	
G 388 2 TRANSISTORS- WORK WITH	61	62	59	58	77	58	TRANSISTORS
G 389 2 TRANSISTORS - INSPECT	56	60	52	58	75	55	
G 390 2 TRANSISTORS - CHECK	54	60	47	33	77	55	
G 391 2 TRANSISTORS - NEED AN UNDERSTANDING OF EMITTER - BASE (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	55	57	53	50	75	52	
G 392 2 TRANSISTORS - USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	55	57	53	58	78	52	
G 393 2 TRANSISTORS - USE OR REFER TO EMITTER - COLLECTOR (EC) RESISTANCE MEASUREMENTS	55	57	52	58	78	52	
G 394 2 TRANSISTORS - USE OR REFER HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE EMITTER - BASE JUNCTION	24	24	23	17	29	23	
G 395 2 TRANSISTOR - USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	23	24	22	17	29	23	
G 396 2 TRANSISTOR - USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE, AND EMITTER)	35	38	32	17	[illegible]	35	
G 397 2 TRANSISTOR - USE OR REFER TO LEAKAGE CURRENT (ICBO)	23	22	24	33	25	22	
G 398 2 TRANSISTOR - USE OR REFER TO SCHEMATIC SYMBOLS	59	60	57	58	74	56	
G 399 2 TRANSISTOR - USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, A2, A3, ETC	53	60	55	58	75	56	
G 400 2 TRANSISTOR - USE OR REFER TO SUBSTITUTION INFORMATION	50	51	49	50	72	44	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
G 401 2 TRANSISTOR - USE OR REFER TO THE GENERAL RULE THAT THE BASE CURRENT IB IS NORMALLY SIGNIFICANTLY SMALLER THAN THE EMITTER CURRENT	29	30	27	25	40	27
G 402 2 TRANSISTOR - USE THE INFORMATION THAT THE EFFECT OF EMITTER BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR	39	37	42	42	57	32
G 403 2 TRANSISTOR - USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) INCREASES AS TEMPERATURE INCREASES	23	22	23	17	25	22
G 404 2 TRANSISTOR - USE OR REFER TO CHARACTERISTIC CURVES OF	17	16	17	8	23	15
G 405 2 TRANSISTOR - USE OR REFER TO BETA	19	18	20	17	20	19
G 406 2 TRANSISTOR - USE OR REFER TO ALPHA	16	17	14	17	18	18
G 407 2 TRANSISTOR - USE OR REFER TO GAMMA	14	15	12	17	17	14
G 408 2 TRANSISTOR - USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE BASE - EMITTER VOLTAGE INTO THE BASE COLLECTOR VOLTAGE (AV = VCB/VBE)	14	14	15	8	18	13
G 409 2 TRANSISTOR - USE OR REFER TO THE CURRENT GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT (AI = IC/IB)	13	13	14	8	18	12
G 410 2 TRANSISTORS - USE OR REFER TO THE POWER GAIN FOR SPECIFIC TRANSISTORS BY MULTIPLYING THE CURRENT GAIN TIMES THE VOLTAGE GAIN (AP = AI X AV)	11	12	11	8	15	11
G 411 2 TRANSISTORS - PERFORM MATCHING THROUGH THE USE OF CURVE TRACING	7	8	6	0	14	8
G 412 3 TRANSISTOR AMPLIFIERS - WORK WITH	49	47	50	58	66	42
G 413 3 TRANSISTOR AMPLIFIERS - INSPECT	45	44	48	58	62	39
G 414 3 TRANSISTOR AMPLIFIERS - ALIGN OR ADJUST	41	42	40	17	62	36
G 415 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT TO THE CIRCUIT LEVEL	43	44	42	25	63	39
G 416 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT TO COMPONENTS	43	44	41	25	65	38
G 417 3 TRANSISTOR AMPLIFIERS - REMOVE OR REPLACE COMPLETE AMPLIFIER	41	43	39	17	65	37
G 418 3 TRANSISTOR AMPLIFIERS - REMOVE OR REPLACE CIRCUIT COMPONENTS	42	44	39	17	65	38
G 419 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM CHANGE IN BASE CURRENT	25	22	29	17	35	19
G 420 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT	14	14	14	8	22	13
G 421 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE CURRENT	25	24	28	17	37	20
G 422 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CHANGE IN CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	26	25	28	17	43	21
G 423 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL	15	15	15	8	25	13

TRANSISTOR AMPLIFIERS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
G 424 3 TRANSISTOR AMPLIFIERS - USE THE LOAD- LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (REQUIRES PLOTTING A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)	7	7	6	8	12	7
G 425 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	18	18	19	0	20	17
G 426 3 TRANSISTOR AMPLIFIERS - MEASURE VOLTAGE GAIN	34	32	36	25	48	26
G 427 3 TRANSISTOR AMPLIFIERS - MEASURE CURRENT GAIN	24	23	25	17	37	19
G 428 3 TRANSISTOR AMPLIFIERS - MEASURE POWER GAIN	27	27	28	17	37	24
G 429 3 TRANSISTOR AMPLIFIERS - USE OR REFER TO THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS BY DIVIDING THE CHANGE IN BASE - EMITTER VOLTAGE INTO THE CHANGE OF THE BASE COLLECTOR VOLTAGE	14	13	14	8	17	13
G 430 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH EMITTER (SWAMPING) RESISTOR STABILIZATION	21	21	21	17	29	19
G 431 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION	20	19	22	17	32	16
G 432 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH SELF-BIAS THERMISTOR STABILIZATION	18	17	20	17	32	13
G 433 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION	22	22	22	8	35	19
G 434 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION	22	22	21	8	35	19
G 435 3 TRANSISTOR AMPLIFIERS - IDENTIFY ON SCHEMATIC DIAGRAMS, WHILE TROUBLESHOOTING THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION	16	15	17	8	26	13
G 436 3 TRANSISTOR AMPLIFIERS - IDENTIFY OR TROUBLESHOOT AMPLITUDE DISTORTION	28	26	31	42	38	23
G 437 3 TRANSISTOR AMPLIFIERS - IDENTIFY FREQUENCY DISTORTION	24	23	26	33	34	20
G 438 3 TRANSISTOR AMPLIFIERS - IDENTIFY PHASE DISTORTION	21	21	22	33	31	18
G 439 3 TRANSISTOR AMPLIFIERS - NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING EMITTER RESISTANCE	18	16	17	17	28	15
G 440 3 TRANSISTOR AMPLIFIERS - DETERMINE THE CLASS OF OPERATION IN ORDER TO TROUBLESHOOT CIRCUITS	18	19	17	8	28	17
G 441 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PARAPHASE	26	27	24	8	34	26
G 442 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PUSH-PULL	34	34	33	25	52	29
G 443 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	20	21	19	25	32	18
G 444 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED	20	21	19	25	34	18
G 445 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR CASCADE-CONNECTED	31	31	31	17	45	28

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
G 446 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR VOLTAGE MULTIPLIERS (DOUBLERS/TRIPLERS)	34	35	33	25	52	30
G 447 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR RF	40	42	39	25	62	36
G 448 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR WIDEBAND (VIDEO)	40	41	38	25	60	36
G 449 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR AUDIO	12	12	11	8	15	11
G 450 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PUSH-PULL OR POWER	38	39	37	17	60	33
G 451 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR PARAPHASE	27	29	24	17	35	27
G 452 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY	18	19	17	25	32	16
G 453 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR IF	40	42	39	25	62	36
G 454 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR DIFFERENTIATING (DIFF)	32	34	30	25	51	29
G 455 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR OPERATIONAL (OP)	32	31	32	25	52	25
G 456 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR INTERGRATING	28	29	27	25	46	24
G 457 3 TRANSISTOR AMPLIFIERS - TROUBLESHOOT OR REPAIR SUMMING	29	29	29	17	49	23
H 458 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO VARACTORS/VARICAPS	37	38	35	50	49	36
H 459 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO TUNNEL DIODES	30	29	32	50	45	23
H 460 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO FIELD EFFECT TRANSISTORS (FET)	38	38	39	50	62	31
H 461 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO UNJUNCTION TRANSISTORS	45	45	45	42	68	39
H 462 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO ZENER DIODES	68	69	67	58	78	67
H 463 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO INTEGRATED CIRCUITS	55	55	55	67	74	49
H 464 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO PIN DIODES	33	33	33	25	52	26
H 465 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO LEDS/LCDS	41	41	41	50	71	32
H 466 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO FANTAIL TRANSISTORS	8	7	8	0	17	5
H 467 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON CONTROL RECTIFICERS (SCRS)	57	54	60	58	77	48
H 468 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO TRIACS	16	14	18	25	31	10
H 469 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO PROGRAMMABLE UNJUNCTION TRANSISTOR (PUT)	13	8	14	17	15	6
H 470 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON CONTROLLED SWITCH (SCS)	16	15	17	25	28	11
H 471 1 SOLID-STATE SPECIAL PURPOSE DEVICES - USE OR REFER TO SILICON UNILATERAL SWITCH (SUS)	8	7	9	8	11	6

SOLID-STATE SPECIAL PURPOSE DEVICES

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

POWER SUPPLIES

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
H 472 2 POWER SUPPLIES - WORK WITH	70	74	66	67	74	73
H 473 2 POWER SUPPLIES - INSPECT	70	76	61	75	82	75
H 474 2 POWER SUPPLIES - CLEAN	64	74	50	33	80	73
H 475 2 POWER SUPPLIES - ALIGN OR ADJUST	68	76	56	25	80	76
H 476 2 POWER SUPPLIES - TROUBLESHOOT TO CIRCUIT LEVEL	65	74	53	25	75	74
H 477 2 POWER SUPPLIES - TROUBLESHOOT TO COMPONENTS	65	74	54	33	77	73
H 478 2 POWER SUPPLIES - REMOVE OR REPLACE COMPLETE UNIT	64	71	54	25	75	70
H 479 2 POWER SUPPLIES - REMOVE OR REPLACE COMPONENTS	65	74	53	25	77	73
H 480 2 POWER SUPPLIES - INSPECT OR SERVICE COOLANT LEVELS	49	54	44	50	66	51
H 481 2 POWER SUPPLIES - WORK WITH HALF-WAVE RECTIFIERS	64	68	58	67	75	67
H 482 2 POWER SUPPLIES - RECTIFIERS - WORK WITH FULL WAVE OTHER THAN BRIDGE	65	68	62	75	72	68
H 483 2 POWER SUPPLIES - RECTIFIERS - WORK WITH BRIDGE	67	70	63	67	71	70
H 484 2 POWER SUPPLIES - RECTIFIERS - WORK WITH THREE PHASE	59	62	54	58	66	62
H 485 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO INPUT VOLTAGE	70	73	67	75	75	72
H 486 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO INPUT FREQUENCY	60	61	58	58	68	60
H 487 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO PEAK OUTPUT VOLTAGE	66	70	61	75	69	70
H 488 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO AVERAGE OUTPUT VOLTAGE	67	70	63	75	74	69
H 489 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO RIPPLE AMPLITUDE	67	70	64	67	72	70
H 490 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO RIPPLE FREQUENCY	59	61	57	50	69	60
H 491 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	48	50	45	58	55	48
H 492 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	66	70	60	58	74	69
H 493 2 POWER SUPPLIES - RECTIFIERS - USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	58	60	56	75	66	58
H 494 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	66	68	63	67	71	67
H 495 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	63	65	62	67	68	65
H 496 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	55	53	59	67	55	53
H 497 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	54	51	58	67	54	51
H 498 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOYS LC PI-TYPE FILTERS	50	46	56	67	[illegible]	45
H 499 2 POWER SUPPLIES - FILTERS - WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	50	46	56	67	52	44
H 500 2 POWER SUPPLIES - FILTERS - HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE	[illegible]	10	5	0	11	11
H 501 2 POWER SUPPLIES - WORK WITH REGULATOR CIRCUITS	67	[illegible]	63	67	69	70

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
H 502 3 OSCILLATORS - WORK WITH	62	64	59	67	65	64	OSCILLATORS
H 503 3 OSCILLATORS - INSPECT	58	61	54	67	68	60	
H 504 3 OSCILLATORS - ALIGN OR ADJUST	55	60	48	25	65	60	
H 505 3 OSCILLATORS - REMOVE OR REPLACE	53	58	47	25	66	56	
H 506 3 OSCILLATORS - REMOVE OR REPLACE COMPONENTS	51	56	46	25	60	56	
H 507 3 OSCILLATORS - TROUBLESHOOT TO CIRCUIT LEVEL	54	59	48	33	66	57	
H 508 3 OSCILLATORS - TROUBLESHOOT TO COMPONENTS	52	57	46	33	63	56	
H 509 3 OSCILLATORS - USE OR REFER TO FEEDBACK (DEGENERATIVE OR REGENERATIVE)	53	53	53	58	55	53	
H 510 3 OSCILLATORS - USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	47	49	45	58	51	50	
H 511 3 OSCILLATORS - USE OR REFER TO AMPLITUDE STABILITY	47	50	45	50	49	51	
H 512 3 OSCILLATORS - USE OR REFER TO FREQUENCY STABILITY	55	57	52	58	60	57	
H 513 3 OSCILLATORS - USE OR REFER TO PIEZOELECTRIC EFFECT (CRYSTAL OSCILLATIONS)	41	41	40	42	48	40	
H 514 3 OSCILLATORS - USE OR REFER TO HARMONIC DISTORTION	40	39	40	42	51	37	
H 515 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK WITH OSCILLATORS WHICH CONTAIN DC TANK CIRCUITS	40	37	45	58	40	37	
H 516 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK WITH OSCILLATORS WHICH CONTAIN RC NETWORKS	46	43	49	67	46	44	
H 517 3 OSCILLATORS - WORK WITH OSCILLATORS WHICH CONTAIN CRYSTALS	54	54	55	58	62	52	
H 518 3 OSCILLATO - WORK WITH OSCILLATORS WHICH CONTAIN PHASE LOCK LOOPS (L)	22	23	22	50	23	22	
H 519 3 OSCILLATORS - FREQUENCY DETERMINING DEVICES (FDD) - WORK WITH OSCILLATORS BUT DON'T KNOW WHICH TYPE OF FDD IT CONTAINS	13	14	11	8	14	14	
H 520 3 OSCILLATORS - SINUSOIDAL - WORK WITH SERIES HARTLEY	34	33	34	42	38	33	
H 521 3 OSCILLATORS - SINUSIODAL - WORK WITH SHUNT HARTLEY	33	33	32	42	38	33	
H 522 3 OSCILLATORS - SINUSOIDAL - WORK WITH COLPITTS	30	26	35	50	35	24	
H 523 3 OSCILLATORS - SINUSOIDAL - WORK WITH CLAPP	14	13	16	33	17	12	
H 524 3 OSCILLATORS - SINUSOIDAL - WORK WITH VOLTAGE CONTROL	31	32	30	58	37	31	
H 525 3 OSCILLATORS - SINUSOIDAL - WORK WITH CRYSTAL	49	48	50	67	52	49	
H 526 3 OSCILLATORS - SINUSOIDAL - WORK WITH VOLTAGE CONTROL OSCILLATORS (VCOS)	29	29	29	58	29	29	
H 527 3 OSCILLATORS - SINUSOIDAL - WORK WITH WIEN BRIDGE OSCILLATORS	22	21	23	33	29	19	
H 528 3 OSCILLATORS - SINUSOIDAL - DON'T KNOW WHICH TYPE OF OSCILLATOR	20	23	17	25	26	22	
H 529 3 OSCILLATORS - WORK WITH PULSE GENERATING CIRCUITS	59	63	54	67	69	61	
H 530 3 OSCILLATORS - WORK WITH BLOCKING OSCILLATORS	56	59	53	67	57	60	
H 531 3 OSCILLATORS - WORK WITH BURST GENERATORS	10	10	10	17	14	9	
H 532 3 OSCILLATORS - WORK WITH BLOCKED OSCILLATORS	40	41	39	67	48	39	
I 533 1 MULTIVIBRATORS - WORK WITH	60	61	59	67	65	60	MULTIVIBRATORS
I 534 1 MULTIVIBRATORS - INSPECT	55	57	53	67	60	56	
I 535 1 MULTIVIBRATORS - ALIGN OR ADJUST	51	55	47	25	55	55	
I 536 1 MULTIVIBRATORS - CALIBRATE	45	47	42	25	46	48	

A20

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC C16	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
I 537 1 MULTIVIBRATORS - TROUBLESHOOT TO CIRCUIT	52	56	47	33	57	56	
I 538 1 MULTIVIBRATORS - TROUBLESHOOT TO CIRCUIT COMPONENTS	50	54	45	33	54	55	
I 539 1 MULTIVIBRATORS - REMOVE OR REPLACE COMPLETE CIRCUITS	46	50	42	25	55	48	
I 540 1 MULTIVIBRATORS - REMOVE OR REPLACE CIRCUIT COMPONENTS	49	54	43	25	55	54	
I 541 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	41	40	41	58	40	41	
I 542 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS (FDD)	47	44	50	58	40	46	
I 543 1 MULTIVIBRATORS - WORK WITH MULTIVIBRATORS WITH CRYSTAL FREQUENCY DETERMINING DEVICES (FDD)	42	42	43	58	42	43	
I 544 1 MULTIVIBRATORS - FREQUENCY DETERMINING DEVICES (FDD) - DON'T KNOW WHICH TYPE OF FDD WORKED WITH	15	18	12	25	29	16	
I 545 1 MULTIVIBRATORS - WORK WITH ASTABLE (FREE RUNNING)	52	54	50	58	54	54	
I 546 1 MULTIVIBRATORS - WORK WITH MONOSTABLE (ONE SHOT)	57	58	56	67	62	56	
I 547 1 MULTIVIBRATORS - WORK WITH BISTABLE (FLIP FLOP)	57	58	55	67	62	57	
I 548 2 LIMITERS - CLAMPERS - WORK WITH	55	60	49	58	63	59	LIMITERS AND CLAMPERS
I 549 2 LIMITERS - CLAMPERS - WORK WITH SERIES DIODE LIMITERS	49	49	49	50	55	47	
I 550 2 LIMITERS - CLAMPERS - WORK WITH SHUNT DIODE LIMITERS	53	55	50	58	62	53	
I 551 2 LIMITERS - CLAMPERS - WORK WITH LIMITERS WITH BIAS	46	49	42	42	51	48	
I 552 2 LIMITERS - CLAMPERS - WORK WITH ZENER DIODE LIMITERS	50	51	48	50	62	48	
I 553 2 LIMITERS - CLAMPERS - WORK WITH TRANSISTOR LIMITERS	38	41	35	50	62	35	
I 554 2 LIMITERS - CLAMPERS - WORK WITH TRIODE LIMITERS	33	37	28	33	34	38	
I 555 2 LIMITERS - CLAMPERS - WORK WITH BASIC DIODE CLAMPING CIRCUITS	50	51	49	58	57	49	
I 556 2 LIMITERS - CLAMPERS - WORK WITH BIAS DIODE CLAMPING CIRCUITS	43	45	40	50	49	44	
I 557 2 LIMITERS - CLAMPERS - WORK WITH DC RESTORERS (DCR)	38	36	40	50	46	34	
I 558 3 ELECTRON TUBES - WORK ON EQUIPMENT WHICH CONTAINS BASIC ELECTRON TUBES	59	63	53	67	45	67	ELECTRON TUBES
I 559 3 ELECTRON TUBES - CHECK CONDITION	55	62	46	50	46	67	
I 560 3 ELECTRON TUBES - USE TUBE TESTERS TO CHECK	55	61	48	50	40	68	
I 561 3 ELECTRON TUBES - USE MULTIMETERS TO CHECK	44	47	40	33	31	52	
I 562 3 ELECTRON TUBES - USE SCOPES TO CHECK	50	54	44	33	43	57	
I 563 3 ELECTRON TUBES - USE SUBSTITUTION TO CHECK	55	61	48	50	43	67	
I 564 3 ELECTRON TUBES - USE OR REFER TO CUTOFF	42	46	38	50	35	49	
I 565 3 ELECTRON TUBES - USE OR REFER TO PEAK INVERSE VOLTAGE RATING	21	24	18	25	25	24	
I 566 3 ELECTRON TUBES - USE OR REFER TO PEAK CURRENT RATING	23	27	18	25	26	28	
I 567 3 ELECTRON TUBES - USE OR REFER TO TRANSIT TIME	19	22	16	0	22	23	
I 568 3 ELECTRON TUBES - USE OR REFER TO PLATE DISSIPATION RATING	16	19	13	17	18	20	
I 569 3 ELECTRON TUBES - USE OR REFER TO SATURATION	46	51	40	50	38	55	
I 570 3 ELECTRON TUBES - USE OR REFER TO DC PLATE RESISTANCE	29	31	28	25	28	32	
I 571 3 ELECTRON TUBES - USE OR REFER TO PLATE VOLTAGE	55	59	50	67	42	54	
I 572 3 ELECTRON TUBES - USE OR REFER TO PLATE CURRENT	46	50	40	58	35	55	
I 573 3 ELECTRON TUBES - USE OR REFER TO GRID VOLTAGE	54	58	49	67	42	63	
I 574 3 ELECTRON TUBES - USE OR REFER TO GRID CURRENT	44	48	38	58	34	53	

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
I 575 3 ELECTRON TUBES - USE OR REFER TO CATHODE VOLTAGE	55	59	50	67	43	64	
I 576 3 ELECTRON TUBES - USE OR REFER TO CATHODE CURRENT	46	50	41	58	34	55	
I 577 3 ELECTRON TUBES - USE OR REFER TO FILAMENT VOLTAGE	57	61	51	67	46	67	
I 578 3 ELECTRON TUBES - USE OR REFER TO THE TRIODE AMPLICIATION FACTOR	22	24	19	8	23	24	
I 579 3 ELECTRON TUBES - USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC.) AMPLIFICATION FACTORS	22	26	17	0	26	26	
I 580 3 ELECTRON TUBES - USE OR REFER TO TRANSCONDUCTANCE	12	14	8	0	14	14	
I 581 3 ELECTRON TUBES - USE OR REFER TO THE PARAMETER CALLED AC PLATE RESISTANCE	12	14	9	0	18	13	
I 582 3 ELECTRON TUBES - USE OR REFER TO INTERELECTRODE CAPACITANCE	20	19	21	0	22	19	
I 583 3 ELECTRON TUBES - USE OR REFER TO CHARACTERISTIC CURVES	15	19	10	0	23	18	
I 584 3 ELECTRON TUBES - USE OR REFER TO PLATE VOLTAGE FOR A SPECIFIED BIAS	33	39	25	6	29	43	
I 585 3 ELECTRON TUBES - USE OR REFER TO PLATE CURRENT FOR A SPECIFIED BIAS	29	34	22	8	25	38	
I 586 3 ELECTRON TUBES - USE OR REFER TO BIAS REQUIRED FOR CUTOFF	38	43	32	42	31	46	
I 587 3 ELECTRON TUBES - USE OR REFER TO BIAS REQUIRED FOR SATURATION	37	43	29	42	32	46	
I 588 3 ELECTRON TUBES - USE OR REFER TO TO GAIN	45	49	40	50	35	55	
I 589 3 ELECTRON TUBES - USE OR REFER TO EFFICIENCY	27	32	20	8	26	34	
I 590 3 ELECTRON TUBES - USE MULTIMETERS TO DETERMINE TUBE AMPLIFIER GAIN	35	39	30	42	23	44	
I 591 3 ELECTRON TUBES - USE OSCILLOSCOPES TO DETERMINE TUBE AMPLIFIER GAIN	49	53	43	42	37	57	
I 592 3 ELECTRON TUBES - USE CHARACTERISTICS CURVES TO DETERMINE TUBE AMPLIFIER GAIN	17	21	12	8	20	21	
I 593 3 ELECTRON TUBES - USE OR REFER TO TUBE SOCKET NOTATION	53	56	49	58	40	61	
I 594 3 ELECTRON TUBES - USE OR REFER TO PIN NUMBERING SYSTEMS	56	60	51	58	38	67	
I 595 3 ELECTRON TUBES - USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	48	51	44	58	37	55	
I 596 3 ELECTRON TUBES - USE OR REFER TO ELECTRON TUBE DIODES	48	50	46	67	34	56	
J 597 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - WORK WITH	57	63	50	42	45	69	ELECTRON TUBE AMPLIFIERS AND CIRCUITS
J 598 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT CIRCUITS	19	22	15	8	11	27	
J 599 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR OR REAPIR PARAPHASE AMPLIFIERS	32	33	30	17	26	37	
J 600 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	41	41	40	25	29	45	
J 601 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	27	28	26	33	20	32	
J 602 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	38	37	40	25	28	41	
J 603 1 ELECTRON TUBE AMPLIFIERS OR CIRCUITS - DON'T KNOW WHICH TYPE OF AMPLIFIER WORKED ON	17	23	9	8	20	24	

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC C16	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
J 604 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	57	60	54	67	45	65	SPECIAL PURPOSE ELECTRON TUBES
J 605 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH CATHODE-RAY TUBES (CRTS)	71	76	64	75	75	77	
J 606 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH BEAM POWER TUBES	40	42	37	58	49	40	
J 607 2 SPECIAL PURPOSE ELECTRON TUBES - WORK WITH THYRATRONS	68	74	61	75	71	75	
J 608 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINICPLES OF OPERATION OF ELECTRON GUNS	51	51	51	33	49	53	
J 609 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS	59	63	54	42	60	63	
J 610 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS	53	53	52	33	58	52	
J 611 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PHOSPHOR SCREENS	51	55	46	33	54	56	
J 612 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO AQUADAG COATINGS	51	53	49	33	55	53	
J 613 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO ELECTRON OPTICS	19	21	17	8	18	22	
J 614 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PERSISTENCE	47	43	53	42	45	44	
J 615 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO DECAY TIMES	31	33	29	17	38	32	
J 616 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO FLOURESCENCE	34	39	28	25	43	37	
J 617 2 SPECIAL PURPOSE ELECTRON TUBES - (CRT) - USE OR REFER TO PHOSPHORESCENCE	39	43	34	33	45	44	
J 618 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - WORK ON TRANSMIT OR RECEIVE SYSTEMS	55	63	45	42	66	62	HETERODYNING AND MODULATION-DEMODULATION (MODEMS)
J 619 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - PERFORM TASKS ON FREQUENCY CONVERTERS	43	47	37	42	58	44	
J 620 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - PERFORM TASKS ON FREQUENCY MIXERS	51	57	44	42	6?	57	
J 621 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - PERFORM TASKS ON MODEMS	10	11	9	17	17	9	
J 622 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - USE OR REFER TO THE HETERODYNING OF SIGNALS IN WORK WITH TRANSMIT OR RECEIVE SYSTEMS	43	49	35	33	52	48	
J 623 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - PERFORM TASKS ON REACTANCE MODULATORS	17	19	14	33	18	20	
J 624 3 HETERODYNING AND MODULATION-DEMODULATION (MODEMS) - PERFORM TASKS ON MODULATED OSCILLATORS	32	37	27	42	42	36	
K 625 1 AM TRANSMIT OR RECEIVE SYSTEMS - WORK ON	17	17	16	17	20	17	AM SYSTEMS
K 626 1 AM TRANSMIT OR RECEIVE SYSTEMS - INSPECT	15	15	16	25	15	16	
K 627 1 AM TRANSMIT OR RECEIVE SYSTEMS - CLEAN	13	15	11	0	15	15	

\23

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
K 628 1 AM TRANSMIT OR RECEIVE SYSTEMS - ALIGN OR ADJUST	14	15	13	0	17	15
K 629 1 AM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO SYSTEM	13	14	12	8	15	14
K 630 1 AM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO COMPONENTS	14	15	12	8	17	15
K 631 1 AM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE SYSTEMS	12	13	11	0	14	12
K 632 1 AM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE COMPONENTS	13	15	11	0	17	15
K 633 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS RF OSCILLAOTRS/SYNTHESIZERS	13	13	13	17	14	13
K 634 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	15	16	14	17	15	16
K 635 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON AUDIO AMPLIFIERS	4	3	5	17	3	3
K 636 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	15	16	14	17	17	16
K 637 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON LOCAL OSCILLATORS	15	16	13	17	15	16
K 638 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	14	15	13	17	17	15
K 639 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON DETECTORS	15	16	13	17	15	16
K 640 1 AM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON MIXER AMPLIFIERS	15	15	14	17	17	15
K 641 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	11	10	11	25	12	10
K 642 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	12	13	12	25	12	13
K 643 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO SENSITIVITY OF RECEIVERS	15	15	15	25	17	15
K 644 1 AM TRANSMIT OR RECEIVE SYSTEMS - USE OR REFER TO SELECTIVITY OF RECEIVERS	14	14	13	17	15	14
K 645 2 FM TRANSMIT OR RECEIVE SYSTEMS - WORK WITH	21	25	15	17	29	25
K 646 2 FM TRANSMIT OR RECEIVE SYSTEMS - INSPECT	21	26	14	25	28	26
K 647 2 FM TRANSMIT OR RECEIVE SYSTEMS - CLEAN	19	25	11	0	28	25
K 648 2 FM TRANSMIT OR RECIEVE SYSTEMS - ALIGN	19	25	12	0	28	24
K 649 2 FM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO SYSTEM	19	25	12	8	28	25
K 650 2 FM TRANSMIT OR RECEIVE SYSTEMS - TROUBLESHOOT TO COMPONENTS	19	25	12	8	29	24
K 651 2 FM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE SYSTEM	17	22	12	0	25	22
K 652 2 FM TRANSMIT OR RECEIVE SYSTEMS - REMOVE OR REPLACE COMPONENTS	19	25	12	0	29	24
K 653 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM LINK PERFORMANCE ASSESSMENTS	9	11	5	8	12	11
K 654 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON AUDIO AMPLIFIERS	5	6	3	8	5	7
K 655 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON FREQUENCY MULTIPLERS	18	23	12	[illegible]	26	23

FM SYSTEMS

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
K 656 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	20	25	14	8	26	25	
K 657 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	20	25	13	8	26	25	
K 658 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	20	25	14	8	26	25	
K 659 2 TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	17	21	12	8	23	21	
K 660 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	20	25	13	8	28	25	
K 661 2 FM TRANSMIT OR RECEIVE SYSTEMS - PERFORM TASKS ON LIMITERS	19	25	12	8	29	24	
K 662 2 FM TRANSMIT OR RECEIVER SYSTEMS - PERFORM TASKS ON FREQUENCY DISCRIMINATORS	17	21	11	6	23	22	
K 663 2 FM TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	19	24	13	25	26	24	
K 664 2 FM TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	20	25	14	25	28	25	
K 665 2 TRANSMIT OR RECEIVE SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSRECEIVERS	12	14	10	25	18	14	
K 666 2 FM TRANSMIT OR RECEIVE SYSTEMS - PLOT RECEIVE SIGNAL LEVEL CURVES (RSL)	6	6	5	8	8	6	
K 667 3 NUMERING SYSTEMS - CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	19	17	22	8	26	14	NUMBERING SYSTEMS
K 668 3 NUMERING SYSTEMS - CONVERT DECIMAL NUMBERS TO BINARY (BASE 2) NUMBERS	28	25	33	25	42	20	
K 669 3 NUMERING SYSTEMS - CONVERT DECIMAL NUMBERS HEXADECIMAL (BASE 16) NUMBERS	8	7	9	8	12	5	
K 670 3 NUMBERING SYSTEMS - CONVCERT OCTAL NUMBERS TO DECIMAL NUMBERS	19	17	22	8	26	13	
K 671 3 NUMBERING SYSTEMS - CONVERT OCTAL NUMBERS TO BINARY NUMBERS	19	17	22	8	26	13	
K 672 3 NUMBERING SYSTEMS - CONVERT OCTAL NUMBERS TO HEXADEMICAL NUMBERS	8	7	8	8	14	5	
K 673 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	28	25	31	25	42	20	
K 674 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO OCTAL NUMBERS	18	16	21	6	26	13	
K 675 3 NUMBERING SYSTEMS - CONVERT BINARY NUMBERS TO HEXIDEMICAL NUMBERS	7	7	8	6	11	5	
K 676 3 NUMBERING SYSTEMS - CONVERT HEXADMEMICAL NUMBERS TO DEMICAL NUMBERS	8	6	10	8	9	5	
K 677 3 NUMBERING SYSTEMS - CONVERT HEXADEMCIAL NUMBERS TO OCTAL NUMBERS	8	7	9	8	14	5	
K 678 3 NUMBERING SYSTEMS - CONVERT HEXADEMICAL NUMBERS TO BINARY NUMBERS	7	6	8	8	11	5	
K 679 3 NUMBERING SYSTEMS - ADD BINARY NUMBERS	28	25	32	25	45	19	

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
K 680 3 NUMBERING SYSTEMS - SUBTRACT BINARY NUMBERS USING THE THE END-AROUND-CARRY METHOD	23	22	25	17	43	15
K 681 3 NUMBERING SYSTEMS - SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTIONB METHOD	24	23	26	17	42	17
K 682 3 NUMBERING SYSTEMS - ADD OCTAL NUMBERS	17	16	18	8	28	12
K 683 3 NUMBERING SYSTEMS - ADD HEXADEMICAL NUMBERS	7	7	7	8	12	5
K 684 3 NUMBERING SYSTEMS - SUBTRACT HEXADEMICAL NUMBERS	8	7	8	8	14	5
K 685 3 NUMBERING SYSTEMS - DIVIDE BINARY NUMBERS	18	17	19	17	34	12
K 686 3 NUMBERING SYSTEMS - MULTIPLY BINARY NUMBERS	19	18	21	17	35	13
K 687 3 NUMBERING SYSTEMS - USE OR REFER TO BINARY CODED DEMICAL (BCD)	26	23	30	25	45	16
K 688 3 NUMBERING SYSTEMS - USE OR REFER TO GRAY CODE	20	19	20	25	37	13
K 689 3 NUMBERING SYSTEMS - USE OR REFER TO ICAO CODE	3	3	4	17	8	1
K 690 3 NUMBERING SYSTEMS - USE OR REFER TO EXCESS-3 CODE	8	6	10	17	11	4
L 691 1 LOGIC FUNCTIONS - PERFORM TASKS RELATING TO	30	30	30	33	58	22
L 692 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	20	19	21	25	38	13
L 693 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR (OR) LOGIC LOGIC SYMBOLS OR GATES	20	19	21	25	38	13
L 694 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR (AND) OR (OR) LOGIC SYMBOLS WITH STATE INDICATORS	20	18	21	25	37	13
L 695 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR EXCLUSIVE (OR) LOGIC SYMBOLS OR GATES	20	18	21	25	38	13
L 696 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (AND) LOGIC SYMBOLS OR GATES	25	24	26	33	49	17
L 697 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (OR) LOGIC SYMBOLS OR GATES	25	25	26	33	51	17
L 698 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (AND OR (OR) LOGIC SYMBOLS WITH STATE INDICATORS	24	24	25	33	48	17
L 699 1 LOGIC FUNCTIONS - USE OR REFER TO TRUTH TABLES FOR (EXCLUSIVE OR) LOGIC SYMBOLS	25	24	26	33	49	16
L 700 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (AND) GATES	29	28	30	33	55	20
L 701 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (OR) GATES	29	28	30	33	55	20
L 702 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIX SYMBOLS FOR (NAND) OR (NOR) GATES	29	28	30	33	57	20
L 703 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR (EXCLUSIVE OR) GATES	28	28	30	33	57	19
L 704 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR INHIBITED (AND) GATES	27	25	29	33	49	18
L 705 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR "B" BARS	6	7	4	8	18	4
L 706 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR "M" BARS	6	7	4	8	18	4
L 707 1 LOGIC FUNCTIONS - USE OR REFER TO LOGIC SYMBOLS FOR COMBINERS	11	10	12	8	18	8

LOGIC FUNCTIONS

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
L 708 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP MULTI-VIBRATOR SYMBOLS	29	29	30	33	52	22	
L 709 1 LOGIC FUNCTIONS - USE OR REFER TO ONE-SHOT MULTI-VIBRATOR SYMBOLS	29	29	29	33	52	22	
L 710 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP CIRCUIT OR SCHEMATIC DIAGRAMS	30	30	31	33	55	22	
L 711 1 LOGIC FUNCTIONS - USE OR REFER TO ONE-SHOT CIRCUIT OR SCHEMATIC DIAGRAMS	29	29	29	33	52	22	
L 712 1 LOGIC FUNCTIONS - USE OR REFER TO FLIP-FLOP TRUTH TABLES	25	24	26	33	46	18	
L 713 1 LOGIC FUNCTIONS - USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	23	24	22	33	46	17	
L 714 1 LOGIC FUNCTIONS - USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	24	24	23	33	48	17	
L 715 1 LOGIC FUNCTIONS - USE OR REFER TO NONCOMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	20	21	19	33	42	15	
L 716 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR "B" BARS	3	4	1	9	14	1	
L 717 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR "M" BARS	3	4	1	8	14	2	
L 718 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR COMBINERS	5	4	6	8	14	2	
L 719 1 LOGIC FUNCTIONS - MEASURE OUTPUT WAVESHAPES OF LOGIC CIRCUITS	27	26	28	25	57	18	
L 720 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	22	22	22	33	46	14	
L 721 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH COMPLEMENT-ING FLIP-FLOP SCHEMATIC DIAGRAMS	22	23	22	33	49	15	
L 722 1 LOGIC FUNCTIONS - TRACE DATA FLOW THROUGH NONCOMPLEMENT ING FLIP-FLOP SCHEMATIC DIAGRAMS	21	21	20	33	46	14	
L 723 1 LOGIC FUNCTIONS - CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	18	17	20	33	40	11	
L 724 2 BOOLEAN EQUATIONS - PERFORM TASKS RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC CIRCUITS	16	14	18	17	29	10	BOOLEAN EQUATIONS
L 725 2 BOOLEAN EQUATIONS - DRAW LOGIC SYMBOLS FOR DIRECT COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	8	6	11	8	12	4	
L 726 1 BOOLEAN EQUATIONS - CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	5	4	6	8	11	2	
L 727 2 BOOLEAN EQUATIONS - DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	8	6	9	8	15	3	
L 728 2 BOOLEAN EQUATIONS - MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	15	13	17	8	28	[illegible]	
L 729 2 BOOLEAN EQUATIONS - DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	7	7	8	8	17	4	
L 730 2 BOOLEAN EQUATIONS - ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	8	7	11	8	17	4	
L 731 2 BOOLEAN EQUATIONS - USE OR REFER TO LOGIC SYMBOLS FOR DIRE COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	12	10	16	17	20	7	
L 732 2 BOOLEAN EQUATIONS - USE OR REFER TO TRUTH TABLES FOR CURRENT MODE LOGIC (CML) CIRCUITS	5	4	6	5	11	2	
L 733 2 BOOLEAN EQUATIONS - USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	15	13	18	17	29	7	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
L 734 2 BOOLEAN EQUATIONS - COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	12	10	14	8	28	5	
L 735 2 BOOLEAN EQUATIONS - TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	12	10	15	8	25	6	
L 736 3 COUNTERS - WORK WITH DIGITAL COUNTERS	29	29	29	17	54	21	COUNTERS
L 737 3 COUNTERS - USE OR REFER TO UP-COUNTERS	28	28	27	17	57	19	
L 738 3 COUNTERS - USE OR REFER TO DOWN-COUNTERS	27	26	27	17	57	17	
L 739 3 COUNTERS - USE OR REFER TO SERIAL COUNTERS	24	24	26	17	51	15	
L 740 3 COUNTERS - USE OR REFER TO PARALLEL COUNTERS	23	22	24	17	46	15	
L 741 3 COUNTERS - USE OR REFER TO RING COUNTERS	12	12	13	17	25	8	
L 742 3 COUNTERS - USE OR REFER TO DECADE (MOD 10) COUNTERS	22	21	22	17	46	13	
L 743 3 COUNTERS - USE OR REFER TO COUNT DETECT CIRCUITS	18	17	19	17	37	11	
L 744 3 COUNTERS - USE OR REFER TO DOWN CLOCKS	26	25	26	17	55	16	
L 745 3 COUNTERS - USE OR REFER TO UP CLOCKS	26	25	26	17	55	15	
L 746 3 COUNTERS - USE OR REFER TO OTHER MODULOUS COUNTERS	16	15	17	17	29	11	
L 747 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS	23	22	25	17	49	13	
L 748 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DOWN-COUNTERS	22	21	24	17	49	12	
L 749 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-DOWN COUNTERS	21	19	22	17	45	11	
L 750 3 COUNTERS TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	20	18	22	17	40	11	
L 751 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	10	8	11	17	18	6	
L 752 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF COUNTERS FEEDING STORAGE REGISTERS	23	21	25	17	49	12	
L 753 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	23	22	24	17	51	13	
L 754 3 COUNTERS - TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	16	15	17	17	32	10	
L 755 3 COUNTERS - CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	11	11	10	17	23	9	
L 756 3 COUNTERS - DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	9	9	10	17	20	6	
L 757 3 COUNTERS - DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	18	18	17	17	43	11	
M 758 1 TIMING CIRCUITS - WORK WITH SAWTOOTH WAVE GENERATORS	59	61	55	58	62	62	TIMING CIRCUITS
M 759 1 TIMING CIRCUITS - WORK WITH TRAPEZOIDAL WAVE GENERATORS	36	35	36	50	46	33	
M 760 1 TIMING CIRCUITS - WORK WITH PULSED OSCILLATORS	49	53	44	58	57	52	
M 761 1 TIMING CIRCUITS - WORK WITH BLOCKING OSCILLATORS	60	64	55	58	60	66	
M 762 1 TIMING CIRCUITS - WORK WITH MASTER STATION TIMING	36	36	35	33	40	35	
M 763 1 TIMING CIRCUITS - USE OR REFER TO RISE TIME	72	76	68	50	82	74	
M 764 1 TIMING CIRCUITS - USE OR REFER TO FALL OR FLYBACK TIME	69	72	64	50	80	71	
M 765 1 TIMING CIRCUITS - USE OR REFER TO SWEEP TIME	71	73	69	58	75	73	
M 766 1 TIMING CIRCUITS - USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS	58	61	54	58	63	60	

PCT MBRS RESP 'YES'- 3Q3X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC C17	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
M 767 1 TIMING CIRCUITS - USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS	57	60	52	50	63	59	
M 768 1 TIMING CIRUCITS - USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS	61	63	58	58	68	62	
M 769 1 TIMING CIRCUITS - USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS	63	66	59	58	71	65	
M 770 2 SIGNAL GENERATORS - USE	69	73	63	50	75	73	USE OF SIGNAL GENERATORS
M 771 2 SIGNAL GENERATORS - PERFORM OPERATIONAL CHECKS WHILE USING	67	72	61	50	74	72	
M 772 2 SIGNAL GENERATORS - PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING	52	57	45	25	60	56	
M 773 2 SIGNAL GENERATORS - TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING	47	51	41	25	49	52	
M 774 2 SIGNAL GENERATORS - TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING	41	43	38	25	45	43	
M 775 2 SIGNAL GENERATORS - USE AUDIO SINE-WAVE GENERATORS	13	11	16	33	17	9	
M 776 2 SIGNAL GENERATORS - USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	21	19	24	33	28	17	
M 777 2 SIGNAL GENERATORS - USE RF GENERATORS LESS THAN 1,000 MH	45	46	44	42	51	45	
M 778 2 SIGNAL GENERATORS - USE RF GENERATORS GREATER THAN 1,000 MH	54	56	51	50	60	56	
M 779 2 SIGNAL GENERATORS - USE WHITE NOISE GENERATORS	7	6	8	0	9	6	
M 780 2 SIGNAL GENERATORS - USE PATTERN GENERATORS	13	14	11	17	23	11	
M 781 2 SIGNAL GENERATORS - USE PSEUDO-RANDOM GENERATORS	7	6	8	0	12	4	
M 782 2 SIGNAL GENERATORS - USE TIME MARK GENERATORS	32	34	29	50	43	32	
M 783 2 SIGNAL GENERATORS - USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	40	43	36	42	45	43	
M 784 3 MOTORS/GENERATORS - PERFORM TASK DEALING WITH AC OR DC MOTORS	62	68	52	67	68	68	MOTORS AND GENERATORS
M 785 3 MOTORS - INSPECT	61	67	52	67	68	67	
M 786 3 MOTORS - CLEAN OR LUBRICATE	56	64	45	25	68	63	
M 787 3 MOTORS - OPERATE	54	60	46	33	68	58	
M 788 3 MOTORS - REMOVE OR REPLACE COMPLETE	57	65	46	33	68	65	
M 789 3 MOTORS - REMOVE OR REPLACE PARTS	44	47	39	17	51	46	
M 790 3 MOTORS - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF	56	65	45	42	69	65	
M 791 3 MOTORS - TROUBLESHOOT DOWN TO COMPONENT PARTS OF	36	39	32	8	48	38	
M 792 3 MOTORS - PERFORM ANY TASKS ON FIELD COILS	22	25	17	8	31	24	
M 793 3 MOTORS - PERFORM ANY TASKS ON ARMATURES	25	28	20	25	34	28	
M 794 3 MOTORS - PERFORM ANY TASKS ON ROTORS	27	31	21	25	37	31	
M 795 3 MOTORS - PERFORM ANY TASKS ON BRUSHES	43	47	38	33	42	50	
M 796 3 MOTORS - PERFORM ANY TASKS ON SLIP RINGS	39	41	35	25	37	44	
M 797 3 MOTORS - PERFORM ANY TASKS ON COMMUTATORS	32	33	31	25	35	34	
M 798 3 MOTORS - PERFORM ANY TASKS ON POLE PIECES	17	19	14	8	28	17	
M 799 3 MOTORS - DETERMINE OR MEASURE FORCE OR TORQUE	10	11	9	8	17	10	
M 800 3 MOTORS - DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE	17	17	16	33	[illegible]	15	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC D14	5 SKL SPC C16	7 SKL SPC C17	9 SKL SPC 022	5 US SPC 025	5 O'S SPC 026	
M 801 3 MOTORS - DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE	13	15	11	0	20	14	
M 802 3 MOTORS - WORK WITH SYNCHRONOUS MOTORS	42	45	38	58	40	46	
M 803 3 MOTORS - WORK WITH INDUCTION MOTORS	43	45	41	58	51	44	
M 804 3 MOTORS - WORK WITH SPLIT-PHASE MOTORS	29	27	31	50	29	27	
M 805 3 MOTORS - WORK WITH SOME COMBINATION OF SYNCHRONOUS, INDUCTION, SPLIT-PHASE MOTORS	34	35	33	33	42	34	
M 806 3 MOTORS - WORK WITH SERVOS OR SYNCHROS	57	64	48	67	57	67	
M 807 3 GENERATORS/ALTERNATORS - INSPECT	25	28	22	67	31	29	
M 808 3 GENERATORS/ALTERNATORS - CLEAN OR LUBRICATE	21	25	14	25	29	26	
M 809 3 GENERATORS/ALTERNATORS - OPERATE	24	27	21	25	29	28	
M 810 3 GENERATORS/ALTERNATORS - REMOVE OR REPLACE	19	22	15	33	28	22	
M 811 3 GENERATORS/ALTERNATORS - REMOVE OR REPLACE PARTS	17	20	13	25	23	21	
M 812 3 GENERATORS/ALTERNATORS - TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS	22	27	16	42	28	28	
M 813 3 GENERATORS/ALTERNATORS - TROUBLESHOOT DOWN TO COMPONENT PARTS	14	16	11	8	20	16	
N 814 1 METERS - WORK WITH METERS	72	78	63	75	77	78	METER MOVEMENTS
N 815 1 METERS - CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	31	36	29	17	37	36	
N 816 1 METERS - CONSIDER THE FUNCTIONS OF MOVING COILS	33	37	27	17	38	36	
N 817 1 METERS - CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	27	32	20	8	35	31	
N 818 1 METERS - READ METER SCALES	72	79	64	75	80	79	
N 819 1 METERS - EXTEND THE RANGE OF AMMETERS	36	39	32	33	48	36	
N 820 1 METERS - ZERO OHMMETERS	70	77	61	50	78	77	
N 821 1 METERS - ZERO AMMETERS	50	54	45	50	58	53	
N 822 1 METERS - EXTEND THE RANGE OF VOLTMETERS	47	54	38	42	58	52	
N 823 1 METERS - USE OR REFER TO VOLTMETER SENSITIVTY	53	54	50	58	55	55	
N 824 1 METERS - CONSIDER BALLASTIC REPONSE OF METER MOVEMENTS	12	14	10	0	22	11	
N 825 1 METERS - CONSIDER OTHER METER MOVEMENTS	31	35	26	17	40	34	
N 826 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - WORK WITH	27	28	25	33	28	30	SATURABLE REACTORS AND MAGNETIC AMPLIFIERS
N 827 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INSPECT	25	26	23	33	25	28	
N 828 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - CLEAN	22	25	19	17	25	26	
N 829 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - ADJUST	21	24	17	17	20	26	
N 830 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - TROUBLESHOOT	22	25	19	17	23	26	
N 831 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - REMOVE OR REPLACE	22	24	18	17	25	25	
N 832 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - REMOVE OR REPLACE COMPONENTS	18	22	13	17	20	24	
N 833 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - USE OR REFER TO HYSTERESIS CURVES OR LOOPS	7	6	8	0	12	5	
N 834 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS	13	14	12	8	15	13	
N 835 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF SATURABLE REACTORS	18	18	17	0	20	19	
N 836 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT WAVEFORMS FOR MAGNETIC AMPLIFIERS	11	13	9	8	14	13	

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
N 837 2 MAGNETIC AMPLIFIERS/SATURABLE REACTORS - USE OR REFER TO SATURABLE REACTOR SCHEMATIC SYMBOLS	21	21	21	33	22	21	
N 838 3 WAVESHAPING CIRCUITS - WORK WITH	64	68	59	67	72	67	WAVESHAPING CIRCUITS
N 839 3 WAVESHAPING CIRCUITS - USE OR REFER TO TRANSIENT INTERVALS (RISE TIME AND FALL TIME)	58	61	55	58	63	61	
N 840 3 WAVESHAPING CIRCUITS - USE OR REFER TO PULSE WIDTH (PW)	64	67	60	67	72	67	
N 841 3 WAVESHAPING CIRCUITS - USE OR REFER TO PULSE RECURRENCE TIME (PRT)	64	67	60	67	72	67	
N 842 3 WAVESHAPING CIRCUITS - USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	64	67	59	67	74	66	
N 843 3 WAVESHAPING CIRCUITS - USE OR REFER TO DIFFERENTIATING CIRCUITS	58	61	54	67	69	59	
N 844 3 WAVESHAPING CIRCUITS - USE OR REFER TO INTEGRATING CIRCUITS	52	54	50	67	68	50	
N 845 3 WAVESHAPING CIRCUITS - USE OR REFER TO THE CLASSIFICATION OF TIME CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT	46	49	43	42	54	49	
N 846 3 WAVESHAPING CIRCUITS - DETERMINE WHETHER AN LR OR RC CIRCUIT IS DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT AND OUTPUT CONFIGURATION	32	31	33	42	35	30	
N 847 3 WAVESHAPING CIRCUITS - WORK WITH SQUARE WAVE GENERATORS	40	43	37	50	60	38	
N 848 3 WAVESHAPING CIRCUITS - WORK WITH RECTANGLER WAVE GENERATORS	28	27	28	50	42	24	
N 849 3 WAVESHAPING CIRCUITS - WORK WITH TRIANGULAR (SAWTOOTH) WAVE GENERATORS	35	36	33	50	54	31	
N 850 3 WAVESHAPING CIRCUITS - WORK WITH RAMP (TRAPEZOIDAL) GENERATORS	23	22	25	33	40	18	
N 851 3 WAVESHAPING CIRCUITS - WORK WITH FUNCTION GENERATORS	25	27	22	42	48	22	
O 852 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - WORK ON	10	13	5	0	20	11	SINGLE OR INDEPENDENT SIDEBAND SYSTEMS
O 853 1 SINGLE OR INDEPEDENT SIDEBAND SYSTEMS - INSPECT TRANSMIT OR RECEIVE SYSTEMS	8	10	5	0	15	9	
O 854 1 SINGLE OR INDEPEDENT SIDEBAND SYSTEMS - CLEAN TRANSMIT OR RECIEVE SYSTEMS	7	9	4	0	15	7	
O 855 1 SINGLE OR INDEPEONET SIDEBAND SYSTEMS - ALIGN TRANSMIT OR RECEIVE SYSTEMS	7	9	5	0	15	8	
O 856 1 SINGLE OR INDEPEDENT SIDEBAND SYSTEMS - TROUBLESHOOT TO TRANSMIT OR RECEIVE SYSTEMS	7	9	4	0	15	7	
O 857 1 SINGLE OR INDEPEDENT SIDEBAND SYSTEMS - TROUBLESHOOT TO TRANSMIT OR RECEIVE COMPONENTS	7	9	4	0	15	8	
O 858 1 SINGLE INDEPENDENT SIDEBAND SYSTEMS - REMOVE OR REPLACE TRANSMIT OR RECEIVE SYSTEMS	7	8	4	0	15	7	
O 859 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - REMOVE OR REPLACE TRANSMIT OR RECEIVE COMPONENTS	7	9	4	0	1[illegible]	8	
O 860 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON AUDIO AMPLIFIERS	3	3	3	0	[illegible]	2	
O 861 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON BALANCED MODULATORS	5	6	3	0	12	4	
O 862 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON CARRIER OSCILLATORS	5	6	3	[illegible]	14	4	

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 TS SPC 025	5 O'S SPC 026
0 863 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON LC FILTERS	5	7	3	0	14	5
0 864 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON CRYSTAL FILTERS	5	7	3	0	14	5
0 865 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON MECHANICAL FILTERS	4	6	2	0	11	4
0 866 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON OSCILLATORS	6	9	3	0	14	6
0 867 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON MIXERS	7	10	3	0	17	8
0 868 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON DRIVERS	7	10	3	0	17	8
0 869 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON POWER AMPLIFIERS	7	10	3	0	17	8
0 870 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	7	9	3	0	15	8
0 871 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	5	7	3	0	14	5
0 872 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	7	10	3	0	17	8
0 873 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM TASKS ON DEMODULATORS	5	6	3	0	12	5
0 874 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO SELECTIVE FADING	2	2	1	0	5	2
0 875 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO PEAK POWER	6	8	4	0	15	7
0 876 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO FREQUENCY STABILITY	6	8	4	0	15	7
0 877 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - USE OR REFER TO REPONSE CURVES FOR BANDWIDTH FILTERS	5	7	3	0	14	5
0 878 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - CALCULATE PEAK POWER OR EFFECTIVE POWER OF TRANSMITTERS	5	7	2	0	12	6
0 879 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH TRANSMITTER SCHEMATIC DIAGRAMS	5	7	2	0	14	6
0 880 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH RECEIVER SCHEMATIC DIAGRAMS	5	7	2	0	14	5
0 881 1 SINGLE OR INDEPENDENT SIDEBAND SYSTEMS - PERFORM AERONAUTIC STATION ASSESSMENT PROGRAMS (ASAP)	1	2	0	0	6	1
0 882 2 PULSE MODULATION SYSTEMS - WORK ON	54	58	50	75	63	56
0 883 2 PULSE MODULATION SYSTEMS - INSPECT	53	57	47	75	66	55
0 884 2 PULSE MODULATION SYSTEMS - CLEAN	47	54	38	33	53	52
0 885 2 PULSE MODULATION SYSTEMS - ALIGN	49	55	40	33	62	53
0 886 2 PULSE MODULATION SYSTEMS - TROUBLESHOOT SYSTEM	48	54	40	33	60	53
0 887 2 PULSE MODULATION SYSTEMS - TROUBLESHOOT COMPONENTS	49	55	41	33	62	53
0 888 2 PULSE MODULATION SYSTEMS - REMOVE OR REPLACE	44	50	36	33	57	49
0 889 2 PULSE MODULATION SYSTEMS - REMOVE OR REPLACE COMPONENTS	48	54	40	33	62	53
0 890 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-AMPLITUDE MODULATION (PAM)	38	41	35	58	43	41

PULSE MODULATION SYSTEMS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
0 891 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-DURATION MODULATION (PDM)	29	30	28	50	31	30
0 892 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-POSITION MODULATION (PPM)	19	22	16	42	29	21
0 893 2 PULSE MODULATION SYSTEMS - WORK ON PULSE-CODE MODULATION (PCM)	26	29	21	42	40	26
0 894 2 PULSE MODULATION SYSTEMS - WORK ON LINE PULSING MODULATION	12	13	11	25	20	11
0 895 2 PULSE MODULATION SYSTEMS - DON'T KNOW TYPE OF MODULATION SYSTEM WORKED ON	13	17	9	0	20	16
0 896 2 PULSE MODULATION SYSTEMS - WORK ON TIME DIVISION MULTIPLEXING (TDM)	7	9	4	25	15	8
0 897 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON POWER SUPPLIES	51	56	46	42	63	54
0 898 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON CHARGING CHOKES AND CHARGING DIODES	49	52	44	42	58	50
0 899 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON PULSE FORMING NETWORKS	50	54	46	42	58	53
0 900 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON TIMERS	43	46	39	42	46	46
0 901 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON SWITCHES SUCH AS GAS THYRATRONS	49	53	45	42	54	53
0 902 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON PULSE TRANSFORMERS	50	54	44	42	55	54
0 903 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON TRANSMITTER TUBES	51	54	46	42	58	54
0 904 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON RF AMPLIFIERS	49	53	44	42	60	51
0 905 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON FREQUENCY CONVERTERS	39	43	34	33	49	41
0 906 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON IF AMPLIFIERS	49	54	43	42	62	53
0 907 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON DETECTORS	49	53	43	42	60	52
0 908 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON VIDEO AMPLIFIERS	49	53	43	42	62	51
0 909 2 PULSE MODULATION SYSTEMS - PERFORM TASKS ON POWER VIDEO AMPLIFIERS	35	39	30	17	43	38
0 910 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	54	57	50	75	63	55
0 911 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE RECURRENCE TIME (PRT)	54	57	50	75	63	55
0 912 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE WIDTH (PW)	54	57	50	75	63	55
0 913 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PULSE SHAPE	54	57	50	75	63	56
0 914 2 PULSE MODULATION SYSTEMS - USE OR REFER TO PEAK POWER	53	56	50	75	62	55
0 915 2 PULSE MODULATION SYSTEMS - USE OR REFER TO AVERAGE POWER	53	57	49	75	62	56
0 916 2 PULSE MODULATION SYSTEMS - USE OR REFER TO DUTY CYCLE (DC)	48	50	45	75	52	49
0 917 2 PULSE MODULATION SYSTEMS - CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	47	49	43	75	54	48

A33

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
0 918 2 PULSE MODULATION SYSTEMS - MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	50	53	47	67	60	51
0 919 2 PULSE MODULATION SYSTEMS - USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	45	46	43	67	45	47
0 920 2 PULSE MODULATION SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH TRANSMITTER SCEHMATIC DIAGRAMS	50	54	46	58	58	53
0 921 2 PULSE MODULATION SYSTEMS - TRACE SIGNALS OR CURRENT PATHS THROUGH RECEIVER SCHEMATIC DIAGRAMS	47	51	41	58	57	50
0 922 3 ANTENNAS - WORK WITH	65	70	59	67	75	69
0 923 3 ANTENNAS - INSPECT	69	70	55	67	72	70
0 924 3 ANTENNAS - CLEAN	55	64	44	25	71	63
0 925 3 ANTENNAS - PHYSICALLY ALIGN	52	58	44	33	68	56
0 926 3 ANTENNAS - ELECTRICALLY ALIGN	51	57	43	33	69	54
0 927 3 ANTENNAS - TROUBLESHOOT TO	54	62	44	33	72	59
0 928 3 ANTENNAS - TROUBLESHOOT TO COMPONENTS	51	58	42	33	69	55
0 929 3 ANTENNAS - REMOVE OR INSTALL	30	34	25	33	51	29
0 930 3 ANTENNAS - REMOVE OR REPLACE COMPONENTS	49	57	39	33	66	55
0 931 3 ANTENNAS - USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR ELECTRIC FIELD LINES	23	24	21	25	28	23
0 932 3 ANTENNAS - USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES	21	21	20	25	25	20
0 933 3 ANTENNAS - DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE	15	18	12	17	25	16
0 934 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS OF CORRECT LENGTH (HALF-WAVE) ACT AS RESISTIVE LOADS TO THE GENERATOR	19	22	15	25	23	23
0 935 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS LONGER THAN HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR	13	16	10	25	18	15
0 936 3 ANTENNAS - USE OR REFER TO THE GENERAL RULE THAT ANTENNAS SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS TO THE GENERATOP	13	14	11	17	18	14
0 937 3 ANTENNAS - WORK WITH HERTZ	4	6	2	0	14	3
0 938 3 ANTENNAS - WORK WITH MARCONI	2	2	2	0	3	2
0 939 3 ANTENNAS - WORK WITH RHOMBIC	3	3	2	0	6	2
0 940 3 ANTENNAS - WORK WITH DIPOLE	22	22	21	42	34	19
0 941 3 ANTENNAS - WORK WITH SCIMITAR	2	3	1	0	6	1
0 942 3 ANTENNAS - WORK WITH PARABOLIC	54	57	51	67	65	56
0 943 3 ANTENNAS - WORK WITH GROUND PLANE	8	10	5	8	14	9
0 944 3 ANTENNAS - WORK WITH BROADSIDE ARRAYS	5	4	5	17	6	4
0 945 3 ANTENNAS - WORK WITH END-FIRE ARRAYS	3	4	2	8	6	3
0 946 3 ANTENNAS - WORK WITH CARDIOID ARRAYS	4	3	5	0	6	2
0 947 3 ANTENNAS - WORK WITH COLLINEAR ARRAYS	5	6	3	0	8	6
0 948 3 ANTENNAS - WORK WITH PHASE ARRAYS	16	17	15	25	23	15
0 949 3 ANTENNAS - USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS	10	12	7	0	14	12

ANTENNAS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
0 950 3 ANTENNAS - MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF	5	7	3	0	11	7
0 951 3 ANTENNAS - USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS	21	21	20	17	25	22
0 952 3 ANTENNAS - MEASURE ELECTROMAGNETIC RADIATION FIELDS	8	10	6	0	12	10
0 953 3 ANTENNAS - USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	9	10	7	0	18	9
0 954 3 ANTENNAS - USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	7	8	6	0	14	7
0 955 3 ANTENNAS - WORK ON LINEARLY POLARIZED	39	39	39	42	40	40
0 956 3 ANTENNAS - WORK ON CIRCULARY POLARIZED	29	31	28	42	31	32
0 957 3 ANTENNAS - MEASURE OR DETERMINE THE POLARITY OF	17	18	16	17	12	19
0 958 3 ANTENNAS - CONSTRUCT, OR MAKE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVE LENGTHS	3	3	4	8	5	2
0 959 3 ANTENNAS - WORK WITH ANTENNA ARRAYS CONTAINING PARASITIC ELEMENTS SERVING AS DIRECTORS	7	8	5	0	14	6
0 960 3 ANTENNAS - WORK WITH ANTENNA ARRAYS CONTAINING PARASITIC ELEMENTS SERVING AS REFLECTORS	14	17	11	8	23	15
0 961 3 ANTENNAS - DON'T KNOW WHAT KIND OF ELEMENT ARRAYS WORKED ON CONTAIN	22	29	13	8	29	28
0 962 3 ANTENNAS - WORK ON UNDIRECTIONAL	42	46	36	42	45	47
0 963 3 ANTENNAS - WORK ON BIDIRECTIONAL	24	27	20	33	31	26
0 964 3 ANTENNAS - WORK WITH ROTARY ARRAYS	38	42	34	58	48	41
P 965 1 TRANSMISSION LINES - WORK WITH	32	35	29	33	45	34
P 966 1 TRANSMISSION LINES - REFER TO OR USE COPPER LOSS OR I2R LOSS	5	5	4	0	11	4
P 967 1 TRANSMISSION LINES - REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN	7	7	6	0	9	8
P 968 1 TRANSMISSION LINES - REFER TO OR USE RADIATION LOSS IN	12	13	12	8	20	12
P 969 1 TRANSMISSION LINES - REFER TO OR USE DIELECTRIC LOSS IN	10	11	9	0	12	11
P 970 1 TRANSMISSION LINES - REFER TO OR USE LEAKAGE LOSSES IN	14	15	12	17	15	17
P 971 1 TRANSMISSION LINES - WORK WITH TWISTED PAIR	5	6	4	8	12	5
P 972 1 TRANSMISSION LINES - WORK WITH TWIN LEAD	5	7	4	8	11	6
P 973 1 TRANSMISSION LINES - WORK WITH OPEN TWO-WIRE	4	6	2	0	11	5
P 974 1 TRANSMISSION LINES - WORK WITH FLEXIBLE COAXIAL CABLE	30	32	27	33	40	31
P 975 1 TRANSMISSION LINES - WORK WITH RIGID COAXIAL CABLE	28	30	26	33	40	28
P 976 1 TRANSMISSION LINES - TROUBLESHOOT	28	32	23	25	42	30
P 977 1 TRANSMISSION LINES - ANALYZE VOLTAGE OR CURRENT WAVEFORMS TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)	17	18	14	17	26	17
P 978 1 TRANSMISSION LINES - SELECT APPROPRIATE TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	20	22	17	25	30	21
P 979 1 TRANSMISSION LINES - USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	22	22	21	25	24	22
P 980 1 TRANSMISSION LINES - MEASURE STANDING WAVE RATIOS (SWR)	28	30	25	17	35	30
P 981 1 TRANSMISSION LINES - CALCULATE STANDING WAVE RATIOS (SWR)	22	24	19	17	29	24
P 982 1 TRANSMISSION LINES - PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER-WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS	6	6	6	8	8	6

TRANSMISSION LINES

PCT MBRS RESP 'YES'- 303X2 CAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
P 983 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	15	18	11	17	20	19
P 984 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	8	10	5	8	14	10
P 985 1 TRANSMISSION LINES - USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO)	16	16	17	17	18	16
P 986 1 TRANSMISSION LINES - CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO)	7	7	6	0	11	8
P 987 1 TRANSMISSION LINES - USE OR REFER TO THE TERM CUT OFF FREQUENCY	8	7	8	8	11	7
P 988 1 TRANSMISSION LINES - USE OR REFER TO THE TERM VELOCITY FACTOR (K)	5	5	6	0	8	4
P 989 1 TRANSMISSION LINES - COMPUTE THE ELECTRICAL LENGTH OF LINES FOR PARTICULAR FREQUENCIES	9	10	8	8	12	9
P 990 1 TRANSMISSION LINES - CONSTRUCT LINES OF PARTICULAR ELECTRICAL LENGTHS FOR GIVEN FREQUENCIES	9	10	7	8	15	10
P 991 1 TRANSMISSION LINES - USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH INCREASES	7	7	7	8	9	8
P 992 1 TRANSMISSION LINES - WORK WITH NONRESONANT (FLAT)	7	9	5	8	15	8
P 993 1 TRANSMISSION LINES - WORK WITH RESONANT	13	15	11	6	20	14
P 994 1 TRANSMISSION LINES - WORK WITH LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	13	12	13	8	14	12
P 995 2 WAVEGUIDES OR CAVITY RESONATORS - WORK WITH	60	64	55	67	72	62
P 996 2 WAVEGUIDES OR CAVITY RESONATORS - INSPECT	59	64	52	67	72	62
P 997 2 WAVEGUIDES OR CAVITY RESONATORS - CLEAN	52	60	42	25	68	58
P 998 2 WAVEGUIDES OR CAVITY RESONATORS - PRESSURIZE	55	62	46	8	72	59
P 999 2 WAVEGUIDES OR CAVITY RESONATORS - PURGE	46	50	41	0	55	49
P1000 2 WAVEGUIDES OR CAVITY RESONATORS - TROUBLESHOOT	47	52	39	33	60	50
P1001 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDES	41	46	33	33	65	40
P1002 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDE SECTIONS	53	59	46	33	74	55
P1003 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL DUMMY LOADS	44	49	37	33	62	44
P1004 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL E BENDS	39	36	32	25	52	32
P1005 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL H BENDS	34	35	32	25	49	31
P1006 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL OTHER BENDS	37	42	30	17	55	38
P1007 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL CHOKE JOINTS	35	37	32	17	45	35
P1008 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL ROTATING JOINTS	44	49	39	33	66	43
P1009 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL DIRECTIONAL COUPLERS	49	54	40	33	69	50

WAVEGUIDES AND CAVITY RESONATORS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
P1010 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL BIDIRECTIONAL COUPLERS	44	49	36	33	60	46
P1011 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL WAVEGUIDE SHUTTERS	29	32	25	25	31	33
P1012 2 WAVEGUIDES OR CAVITY RESONATORS - REMOVE OR INSTALL TRANSMIT (TR) OR ANTI-TRANSMIT (ATR) TUBES	46	53	38	33	55	52
P1013 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO "A" WALL OF WAVEGUIDES	13	13	12	17	14	13
P1014 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO "B" WALL OF WAVEGUIDES	13	13	12	17	14	13
P1015 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO CUT OFF FREQUENCY	14	14	13	0	17	14
P1016 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO FREQUENCY-DETERMINING WALL	12	14	9	8	17	14
P1017 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO POWER-DETERMINING WALL	10	13	7	8	14	13
P1018 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO ELECTRIC FILED BOUNDARY CONDITIONS	8	10	5	0	12	10
P1019 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	8	10	5	0	12	10
P1020 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO DUPLEXER FIELD BOUNDARY CONDITIONS	8	10	5	0	12	10
P1021 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" OF WALL SIZE OF .7 WAVELENGTHS OF THE OPERATING FREQUENCY	9	10	7	8	11	11
P1022 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 AS AN AVERAGE	7	8	6	8	9	9
P1023 2 WAVEGUIDES OR CAVITY RESONATORS - COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	6	8	4	0	9	7
P1024 2 WAVEGUIDES OR CAVITY RESONATORS - USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" LINES IN WAVEGUIDES	12	13	11	0	14	13
P1025 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	6	7	5	0	8	7
P1026 2 WAVEGUIDES OR CAVITY RESONATORS - MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	5	6	3	0	6	6
P1027 2 WAVEGUIDES OR CAVITY RESONATORS - USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	5	6	3	0	6	6
P1028 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - HIGH POWER PROBES	34	34	34	42	43	32
P1029 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - LOW POWER PROBES	31	27	35	42	34	26
P1030 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - LOOPS	36	37	36	58	38	37
P1031 2 WAVEGUIDES OR CAVITY RESONATORS - ENERGY COUPLING USED - APERTURES (WINDOWS OR IRISES)	47	47	47	42	52	46

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
P1032 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - CHOKE	45	43	48	58	49	43	
P1033 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - ROTATING	55	57	51	67	65	56	
P1034 2 WAVEGUIDES OR CAVITY RESONATORS - JOINTS USED - DON'T KNOW KIND	9	12	6	0	14	11	
P1035 2 WAVEGUIDES OR CAVITY RESONATORS - TUNE CAVITY RESOANTORS USING ELECTRICAL METHODS	30	33	26	25	38	31	
P1036 2 WAVEGUIDES OR CAVITY RESONATORS - TUNE CAVITY RESONATORS USING MECHANICAL METHODS	36	40	32	42	35	42	
P1037 2 WAVEGUIDES OR CAVITY RESONATORS - MEASURE THE FREQUENCY OF SIGNALS ON CAVITY RESONATORS	31	34	27	42	29	35	
P1038 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS	54	58	48	67	58	58	MICROWAVE AMPLIFIERS AND OSCILLATORS
P1039 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO INTERELECTRODE CAPACITANCE	18	20	15	8	20	21	
P1040 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO ELECTRON TRANSIT TIME	19	22	16	8	23	22	
P1041 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO LEAD INDUCTANCE	13	15	12	8	15	15	
P1042 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	26	29	23	25	31	29	
P1043 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	26	26	27	8	26	26	
P1044 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - USE OR REFER TO ELECTRON BUNCHING	31	31	31	8	31	32	
P1045 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH TWO-CAVITY KLYSTRONS	7	7	7	8	12	6	
P1046 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH THREE-CAVITY KLYSTRONS	32	31	32	8	28	33	
P1047 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH REFLEX KLYSTRONS	18	16	22	42	15	16	
P1048 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH TRAVELING-WAVE TUBES (TWT)	31	32	30	25	45	29	
P1049 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	8	10	6	8	8	11	
P1050 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	6	7	4	17	11	6	
P1051 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH MAGNETRONS	21	23	19	58	20	24	
P1052 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - WORK WITH BACKWARD WAVE OSCILLATORS (BWO)	19	20	17	17	20	21	
P1053 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - INSPECT KLYSTRONS OR TWT'S	42	43	40	58	51	41	
P1054 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - CLEAN KLYSTRONS OR TWT'S	36	40	31	17	49	38	
P1055 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TUNE KLYSTRONS OR TWT ELECTRICALLY	29	31	27	25	38	29	

PCT MBRS RESP 'YES'- 3D3X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
P1056 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TUNE KLYSTRONS OR TWT MECHANICALLY	32	36	26	25	35	36
P1057 3 MICROWAVE AMPLIFIERS OR OSCILLATORS - PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWTS	42	47	37	33	55	44
P1058 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - TROUBLESHOOT KLYSTRONS OR TWTS	40	44	35	25	54	41
P1059 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	41	46	34	25	57	43
P1060 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	24	28	19	8	35	27
P1061 3 MICROWAVE AMPLIFIERS AND OSCILLATORS - INSPECT PARAMETRIC AMPLIFIERS	13	15	11	50	14	16
P1062 3 PARAMETRIC AMPLIFIERS - CLEAN	12	14	9	17	14	14
P1063 3 PARAMETRIC AMPLIFIERS - ADJUST	13	15	10	25	14	15
P1064 3 PARAMETRIC AMPLIFIERS - TUNE	13	14	11	25	12	15
P1065 3 PARAMETRIC AMPLIFIERS - PERFORM OPERATIONAL CHECKS	14	15	12	33	11	17
P1066 3 PARAMETRIC AMPLIFIERS - TROUBLESHOOT	13	15	10	25	14	15
P1067 3 PARAMETRIC AMPLIFIERS - REMOVE OR REPLACE	11	13	9	25	17	13
P1068 3 PARAMETRIC AMPLIFIEPS - REMOVE OR REPLACE COMPONENTS	10	12	6	17	14	12
P1069 3 MAGNETRONS - INSPECT	19	19	17	58	14	22
P1070 3 MAGNETRONS - CLEAN	16	19	13	25	14	21
P1071 3 MAGNETRONS - ADJUST	17	19	14	25	15	21
P1072 3 MAGNETRONS - TUNE	17	18	15	25	15	20
P1073 3 MAGNETRONS - PERFORM OPERATIONAL CHECKS	19	22	16	42	18	23
P1074 3 MAGNETRONS - TROUBLESHOOT	16	18	14	25	17	19
P1075 3 MAGNETRONS - REMOVE OR REPLACE	16	18	13	25	15	20
P1076 3 MAGNETRONS - REMOVE OR REPLACE COMPONENTS	10	11	8	0	8	12
P1077 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINICIPLES OF COLLECTOR PLATES	7	7	7	8	12	6
P1078 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER CAVITIES	6	6	5	8	11	5
P1079 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATCHER GRIDS	5	7	4	8	12	5
P1080 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF FEEDBACK LOOPS	6	7	5	8	12	5
P1081 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF DRIFT SPACES	6	6	5	8	12	5
P1082 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER GRIDS	5	6	5	8	11	5
P1083 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF BUNCHER CAVITIES	5	6	4	8	11	5
P1084 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CONTROL GRIDS	6	7	6	8	11	6
P1085 3 TWO CAVITY KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES	8	6	8	8	12	7
P1086 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF REPELLER (REFLECTOR) PLATES	14	12	17	42	12	12

PCT MBRS RESP 'YES' - 3Q3X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
P1087 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF GRIDS	14	13	15	33	12	13
P1088 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF GRID CAVITY GAPS	11	11	11	25	11	11
P1089 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF RESONANT CAVITIES	14	13	15	33	11	14
P1090 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETIC COUPLING LOOPS	11	11	11	42	8	12
P1091 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENTS	15	13	17	33	11	14
P1092 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES	15	12	18	33	11	13
P1093 3 REFLEX KLYSTRONS - USE OR REFER TO THE OPERATING PRINCIPLES OF OUTPUT LEADS	14	13	16	33	12	13
P1094 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF FILAMENTS OF	24	24	24	8	34	22
P1095 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF CATHODES OF	24	24	23	8	31	22
P1096 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF MODULATOR GRIDS OF	20	21	19	8	26	20
P1097 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF ANODES OF	23	23	23	8	28	22
P1098 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF HELIXES OF	23	22	24	8	26	22
P1099 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF COLLECTORS OF	23	22	24	8	29	21
P1100 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF MAGNETS OF	20	21	20	8	26	20
P1101 3 TRAVELING WAVE TUBES - USE OR REFER TO THE OPERATING PRINCIPLES OF ATTENUATORS OF	23	23	22	8	31	22
P1102 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON FERRITE CIRCULATORS	10	12	7	17	11	13
P1103 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON SIGNAL CAVITIES	8	10	4	25	11	11
P1104 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON IDLER CAVITIES	5	6	3	25	9	6
P1105 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON VARACTOR DIODES	8	10	6	25	11	10
P1106 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON FERRITE ISOLATORS	10	12	7	25	15	12
P1107 3 PARAMETRIC AMPLIFIERS - PERFORM TASKS ON REVERSE-BIAS BATTERIES	4	5	2	25	6	5
P1108 3 MAGNETRONS - PERFORM TASKS ON ANODES OF	9	9	8	17	8	10
P1109 3 MAGNETRONS - PERFORM TASKS ON ANODE COOLING PINS OF	7	8	6	8	8	8
P1110 3 MAGNETRONS - PERFORM TASKS ON COUPLING LOOPS OF	8	9	7	17	9	10
P1111 3 MAGNETRONS - PERFORM TASKS ON HEATER LEADS OF	10	11	8	25	14	11
P1112 3 MAGNETRONS - PERFORM TASKS ON RESONANT CAVITIES OF	9	11	8	8	9	11
P1113 3 MAGNETRONS - PERFORM TASKS ON CATHODES OF	10	11	9	17	11	11
P1114 3 MAGNETRONS - PERFORM TASKS ON MAGNETS OF	9	10	8	25	8	11
Q1115 1 REGISTERS - USE OR REFER TO STORAGE	28	26	31	33	51	18

REGISTERS

PCT MBRS RESP 'YES'- 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
Q1116 1 REGISTERS - USE OR REFER TO SHIFT	29	28	32	33	52	20
Q1117 1 REGISTERS - USE OR REFER TO LOGIC SMYBOLS OF SHIFT	28	26	30	33	52	19
Q1118 1 REGISTERS - USE OR REFER TO LOGIC SYMBOLS OF STORAGE	27	26	29	33	51	19
Q1119 1 REGISTERS - TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT	26	26	26	25	49	19
Q1120 1 REGISTERS - TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF REGISTER OTHER THAN SHIFT OR STORAGE	24	25	24	25	48	18
Q1121 1 REGISTERS- DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES HAVE PASSED	24	24	24	25	49	16
Q1122 2 STORAGE DEVICES - WORK WITH	27	27	28	17	49	21
Q1123 2 STORAGE DEVICES - USE OR REFER TO DELAY LINES	26	28	23	17	49	21
Q1124 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC CORES OR BIMAGS	4	3	5	17	5	3
Q1125 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC DRUMS	3	2	3	8	3	2
Q1126 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC TAPES	3	2	5	8	5	1
Q1127 2 STORAGE DEVICES - USE OR REFER TO ACESS TIME OR SPEED OF MEMORY SYSTEMS	7	5	9	8	9	4
Q1128 2 STORAGE DEVICE - USE OR REFER TO STORAGE CAPACITY OF MEMORY SYSTEMS	12	11	13	8	23	6
Q1129 2 STORAGE DEVICES - USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	5	4	6	8	6	3
Q1130 2 STORAGE DEVICES - USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	16	16	16	17	37	10
Q1131 2 STORAGE DEVICES - USE OR REFER TO MAGNETIC DISKS	3	3	3	8	6	1
Q1132 2 STORAGE DEVICES - USE OR REFER TO THIN FILM	2	2	2	8	6	1
Q1133 2 STORAGE DEVICES - USE OR REFER TO SEMICONDUCTOR MEMORY (INTEGRATED) CIRCUITS	16	15	18	17	37	9
Q1134 2 STORAGE DEVICES - USE OR REFER TO BUBBLE MEMORY	2	1	2	8	5	0
Q1135 2 STORAGE DEVICES - USE OR REFER TO PUNCH CARDS	4	2	6	8	6	1
Q1136 2 STORAGE DEVICES - USE OR REFER TO PAPER TAPE	2	1	3	8	2	0
Q1137 2 STORAGE DEVICES - USE OR REFER TO RANDOM ACCESS MEMORY (RAM)	10	10	11	17	25	6
Q1138 2 STORAGE DEVICES - USE OR REFER TO READ ONLY MEMORY (ROM)	15	16	15	17	37	10
Q1139 2 STORAGE DEVICES - USE OR REFER TO PROGRAMMABLE READ ONLY MEMORY (PROM)	15	15	15	8	37	8
Q1140 2 STORAGE DEVICES - USE OR REFER TO TRANSFORMER READ ONLY STORAGE (TROS)	2	2	1	8	6	1
Q1141 2 STORAGE DEVICES - USE OR REFER TO CAPACITY READ ONLY STORAGE (CROS)	2	2	1	8	6	1
Q1142 2 STORAGE DEVICES - INSPECT	19	22	15	25	46	14
Q1143 2 STORAGE DEVICES - CLEAN	16	20	11	8	46	12
Q1144 2 STORAGE DEVICES - ALIGN	12	15	9	8	32	10
Q1145 2 STORAGE DEVICES - ADJUST	12	15	7	8	31	11
Q1146 2 STORAGE DEVICES - TROUBLESHOOT MEMORY SYSTEMS	16	18	13	17	43	10
Q1147 2 STORAGE DEVICES - REMOVE OR REPLACE SUBASSEMBLIES OR COMPONENTS	16	19	12	17	43	12

STORAGE DEVICES

PCT MBRS RESP 'YES' - 303X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026	
Q1148 2 STORAGE DEVICES - TRACE SIGNAL FLOW USING LOGIC DIAGRAMS OR SCHEMATICS	20	21	19	17	45	14	
Q1149 3 DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D) CONVERTERS - WORK WITH	25	22	28	17	48	14	DIGITAL TO ANALOG AND ANALOG TO DIGITAL CONVERTERS
Q1150 3 DIGITAL-TO-ANALOG(D/A) OR (ANALOG -TO-DIGITAL(A/D) CONVERTERS - COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL (D/A) CONVERTERS FOR GIVEN INPUT VOLTAGES	12	12	12	8	20	9	
Q1151 3 DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D) CONVERTERS - USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL (D/A) CONVERTERS IS DETERMINED BY ADDING THE DENOMINATORS OF THE RESISTORS	8	8	8	8	15	6	
Q1152 3 DIGITAL-TO-ANALOG(D/A) OR (ANALOG-TO-DIGITAL(A/D) CONVERTERS - COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC (D/A) CONVERTER	14	13	15	17	28	8	
Q1153 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON SAMPLE FUNCTION	11	11	11	8	26	6	
Q1154 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON HOLD FUNCTION	10	10	11	8	23	5	
Q1155 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON COMPARE FUNCTION	12	11	12	17	31	5	
Q1156 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON DIGITIZE FUNCTION	12	11	14	17	28	5	
Q1157 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - DON'T KNOW WHICH FUNCTION TASKS PERFORMED ON	6	6	6	0	14	3	
Q1158 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO SAMPLE FUNCTION	13	11	15	8	26	7	
Q1159 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO HOLD FUNCTION	11	10	13	8	23	6	
Q1160 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO COMPARE FUNCTION	12	11	14	17	28	6	
Q1161 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - USE OR REFER TO DIGITAL FUNCTION	16	15	17	17	35	9	
Q1162 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON MECHANICAL (A/D) CONVERTERS	7	6	8	17	12	3	
Q1163 3 ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS - PERFORM TASKS ON ELECTRONIC A/D CONVERTERS	18	17	21	17	40	9	
Q1164 3 DIGITAL-TO-ANALOG (D/A) CONVERTER CIRCUITS - PERFORM TASKS ON	18	17	18	17	42	9	
R1165 1 PHANTASTRON - WORK WITH PHANTASTRON CIRCUITRY	16	16	16	25	18	15	PHANTASTRONS
R1166 2 SCHMITT TRIGGER CIRCUITS - WORK WITH	29	34	23	33	49	31	SCHMITT TRIGGERS
R1167 2 SCHMITT TRIGGER CIRCUITS - TRACE DATA FLOW THROUGH SCHEMATIC DIAGRAMS OF	26	31	20	25	40	29	
R1168 2 SCHMITT TRIGGER CIRCUITS - USE OR REFER TO LOGIC SYMBOLS FOR	21	24	18	33	40	20	
R1169 3 CABLE FABRICATION - FABRICATE MULTICONDUCTOR CABLES	53	59	44	33	67	58	CABLE FABRICATION
R1170 3 CABLE FABRICATION - FABRICATE COAXIAL CABLES	61	69	50	33	77	68	
S1171 1 INPUT/OUTPUT (PERIPHERAL)DEVICES OR TERMS - WORK WITH	32	36	28	50	60	29	INPUT/OUTPUT (PERIPHERAL) DEVICES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
S1172 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO KEYBOARDS OR TELETYPEWRITERS	5	4	6	25	2	4	
S1173 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO PRINTERS	6	4	8	33	2	5	
S1174 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE DRIVES (UNITS)	4	2	6	8	3	2	
S1175 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO CARD READERS/CARD PUNCH	4	2	6	17	0	2	
S1176 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO VIDEO DISPLAYS (CRTS)	29	31	27	50	48	26	
S1177 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO NIXIE LIGHTS (TUBES)	9	8	11	33	12	7	
S1178 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO LEDS	23	23	22	25	51	15	
S1179 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO LCDS	9	7	10	17	11	6	
S1180 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO INCANDESENT DISPLAYS	11	11	11	17	23	8	
S1181 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TOGGLE OR PUSH BUTTON SWITCH INPUTS	24	24	24	50	40	20	
S1182 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO INTERFACE ADAPTER UNITS	8	7	10	8	15	5	
S1183 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE READERS	3	2	5	8	2	2	
S1184 1 INPUT/OUTPUT (PERIPHERAL) DEVICES OR TERMS - USE OR REFER TO TAPE PUNCHES	3	1	4	8	2	1	
S1185 2 PHOTO-SENSITIVE DEVICES - WORK WITH	19	19	20	17	26	17	PHOTOSENSITIVE DEVICES
S1186 3 SYNCHRONOUS VIBRATONS (CHOPPER CIRCUITS) - WORK WITH	20	19	21	8	23	20	SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)
S1187 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE OR REFER TO EXCITATION FREQUENCIES	12	11	14	8	12	11	
S1188 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS	12	12	13	8	14	12	
S1189 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - MEASURE CHOPPER COIL EXCITATION FREQUENCIES	10	10	10	6	14	9	
S1190 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS)- MEASURE CHOPPER COIL VOLTAGE-CURRENT PHASE RELATIONSHIPS	10	9	10	8	12	9	
S1191 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	13	15	10	8	14	16	
S1192 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	13	13	13	8	14	14	
S1193 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	16	16	16	8	17	17	
S1194 3 SYNCHRONOUS VIBRATIONS (CHOPPER CIRCUITS) - USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION	17	17	17	8	14	17	
T1195 1 INFRARED SYSTEMS - WORK WITH	2	2	1		2	2	INFRARED SYSTEMS

PCT MBRS RESP 'YES'- 3Q3X2 DAFSC/CONUS/OS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
T1196 1 INFRARED SYSTEMS - INSPECT	1	1	0	0	0	1
T1197 1 INFRARED SYSTEMS - CLEAN	1	1	0	0	0	1
T1198 1 INFRARED SYSTEMS - SERVICE	1	1	0	0	0	1
T1199 1 INFRARED SYSTEMS - ADJUST OR CALIBRATE	1	1	0	0	0	1
T1200 1 INFRARED SYSTEMS - OPERATE	1	1	1	0	[illegible]	1
T1201 1 INFRARED SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF	1	1	0	0	0	1
T1202 1 INFRARED SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF	1	1	0	0	0	1
T1203 1 INFRARED SYSTEMS - TROUBLESHOOT TO COMPONENT PARTS	1	1	0	0	0	1
T1204 1 INFRARED SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	1	1	0	0	0	1
T1205 1 INFRARED SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	1	1	0	0	0	1
T1206 1 INFRARED SYSTEMS - USE OR REFER TO FAR REGION	1	0	1	0	0	0
T1207 1 INFRARED SYSTEMS - USE OR REFER INTERMEDIATE REGION	0	0	0	0	0	0
T1208 1 INFRARED SYSTEMS - USE OR REFER TO NEAR REGION	0	0	0	0	0	0
T1209 1 INFRARED SYSTEMS - USE OR REFER TO MICRON	1	0	1	0	0	0
T1210 1 INFRARED SYSTEMS - USE OR REFER GRAY BODIES	0	0	0	0	0	0
T1211 1 INFRARED SYSTEMS - USE OR REFER TO BLACK BODIES	0	0	0	0	0	0
T1212 1 INFRARED SYSTEMS - USE OR REFER TO ABSORPTION	0	0	0	0	0	0
T1213 1 INFRARED SYSTEMS - USE OR REFER TO SCATTERING	1	1	0	0	0	1
T1214 1 INFRARED SYSTEMS - USE OR REFER TO ABSOLUTE ZERO	1	0	1	0	0	0
T1215 1 INFRARED SYSTEMS - PERFORM TASKS ON BLITZ	0	0	0	0	0	0
T1216 1 INFRARED SYSTEMS - PERFORM TASKS ON TARGET BUTTONS	0	0	0	0	0	0
T1217 1 INFRARED SYSTEMS - PERFORM TASKS ON ERECTOR LENSES	0	0	0	0	0	0
T1218 1 INFRARED SYSTEMS - PERFORM TASKS ON OCULAR LENSES	0	0	0	0	0	0
T1219 1 INFRARED SYSTEMS - PERFORM TASKS ON CORRECTION LENSES	0	0	0	0	0	0
T1220 1 INFRARED SYSTEMS - PERFORM TASKS ON FILTERS	1	1	2	8	0	1
T1221 1 INFRARED SYSTEMS - PERFORM TASKS ON SPHERICAL MIRRORS	1	1	0	0	0	1
T1222 1 INFRARED SYSTEMS - PERFORM TASKS ON PLANE MIRRORS	0	0	0	0	0	0
T1223 2 LASER SYSTEMS - WORK WITH	1	1	1	0	2	1
T1224 2 LASER SYSTEMS - INSPECT	0	0	0	0	0	0
T1225 2 LASER SYSTEMS - CLEAN	0	0	0	0	0	0
T1226 2 LASER SYSTEMS - SERVICE	0	0	0	0	0	0
T1227 2 LASER SYSTEMS - OPERATE	0	0	0	0	0	0
T1228 2 LASER SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF	0	0	0	0	0	0
T1229 2 LASER SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF	0	0	0	0	0	0
T1230 2 LASER SYSTEMS - TROUBLESHOOT TO COMPONENT PARTS	0	0	0	0	0	0
T1231 2 LASER SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	0	0	0	0	0	0
T1232 2 LASER SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	0	0	0	0	0	0
T1233 2 LASER SYSTEMS - USE OR REFER TO ANGSTROMS (A)	0	1	0	0	2	0
T1234 2 LASER SYSTEMS - USE OR REFER TO ELECTRON ENERGY LEVELS	0	1	0	0	2	0
T1235 2 LASER SYSTEMS - USE OR REFER TO GROUND STATE	0	1	0	0	2	0
T1236 2 LASER SYSTEMS - USE OR REFER TO TO EXCITED STATE	0	1	0	0	2	0
T1237 2 LASER SYSTEMS - USE OR REFER TO PACKET OF RADIATION	0	1	0	0	2	0
T1238 2 LASER SYSTEMS - USE OR REFER TO PHOTONS	0	0	0	0	0	0
T1239 2 LASER SYSTEMS - USE OR REFER TO SPONTANEOUS EMISSION	0	0	0	0	0	0
T1240 2 LASER SYSTEMS - USE OR REFER TO STIMULATED EMISSION	0	1	0	0	2	0
T1241 2 LASER SYSTEMS - USE OR REFER TO COHERENCE OR INCOHERANCE	0	1	0	0	2	0
T1242 2 LASER SYSTEMS - USE OR REFER TO INVERSION LEVEL	0	1	0	0	2	0

LASERS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026
T1243 2 LASER SYSTEMS - USE OR REFER TO MONOCHROMATIC	0	0	0	0	0	0
T1244 2 LASER SYSTEMS - WORK WITH ACTIVE MATERIALS	0	0	0	0	0	0
T1245 2 LASER SYSTEMS - WORK WITH PUMPING SOURCES	0	0	0	0	0	0
T1246 2 LASER SYSTEMS - WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	1	0	0	0	1
T1247 2 LASER SYSTEMS - WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS	0	0	0	0	0	0
T1248 2 LASER SYSTEMS - WORK WITH HELICAL FLASHTUBES	0	0	0	0	0	0
T1249 2 LASER SYSTEMS - WORK WITH RUBY	0	0	0	0	0	0
T1250 2 LASER SYSTEMS - WORK WITH HELIUM-NEON	0	0	0	0	0	0
T1251 2 LASER SYSTEMS - WORK WITH HELIUM-XENON	0	0	0	0	0	0
T1252 2 LASER SYSTEMS - WORK WITH XENON	0	0	0	0	0	0
T1253 2 LASER SYSTEMS - WORK WITH CESIUM-HELIUM	0	0	0	0	0	0
T1254 2 LASER SYSTEMS - WORK WITH ARGON	0	0	0	0	0	0
T1255 2 LASER SYSTEMS - WORK WITH NEODYMIUM IN GLASS	0	0	0	0	0	0
T1256 2 LASER SYSTEMS - WORK WITH GALLIUM ARSENIDE	0	0	0	0	0	0
T1257 3 DISPLAY TUBES - WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST), MULTIPLE MODE STORAGE TUBES (MMST), OR SCAN CONVERTER TUBES (SCT)	2	3	1	8	2	2
T1258 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - INSPECT	1	2	1	8	0	2
T1259 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - CLEAN	1	2	1	[illegible]	0	2
T1260 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - ADJUST OR CALIBRATE	1	1	0	8	0	2
T1261 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - OPERATE SYSTEMS THAT CONTAIN DVST OR MMST	1	2	1	8	0	2
T1262 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - TROUBLESHOOT CIRCUITS	1	1	1	8	0	2
T1263 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - REMOVE OR REPLACE TUBES FROM MAJOR ASSEMBLIES OR UNITS	1	1	1	8	0	2
T1264 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF DVST	0	0	0	0	0	0
T1265 3 DISPLAY TUBES - DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE STORAGE (MMST) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF MMST	0	0	0	0	0	0
T1266 3 DISPLAY TUBES - SCAN CONVERTER TUBES (SCT) - PERFORM TASKS THAT MAKE IT NECESSARY TO NAME VARIOUS ELEMENTS OF SCT	0	0	0	0	0	0
T1267 3 DISPLAY TUBES - PERFORM TASKS ON FLOOD GUNS	0	0	0	8	0	0
T1268 3 DISPLAY TUBES - PERFORM TASKS ON WRITE GUNS	1	1	0	8	0	2
T1269 3 DISPLAY TUBES - PERFORM TASKS ON READ GUNS	1	1	0	8	0	2
T1270 3 DISPLAY TUBES - PERFORM TASKS ON ATTACK GUNS	0	0	0	0	0	0
T1271 3 DISPLAY TUBES - PERFORM TASKS ON ERASE GUNS	1	1	0	8	0	2

DISPLAY TUBES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 O's SPC 026	
T1272 3 DISPLAY TUBES - PERFORM TASKS ON STORAGE GRIDS	1	1	0	8	0	2	
T1273 4 TELEVISION (TV) SYSTEMS - PERFORM TASKS DEALING WITH TV SYSTEMS INCLUDING LOW LIGHT TV	2	2	2	25	2	2	TELEVISION
T1274 4 TELEVISION (TV) SYSTEMS - INSPECT	0	0	0	25	0	0	
T1275 4 TELEVISION (TV) SYSTEMS - CLEAN	1	1	0	8	2	0	
T1276 4 TELEVISION (TV) SYSTEMS - ADJUST	1	1	0	8	0	1	
T1277 4 TELEVISION (TV) SYSTEMS - OPERATE	1	1	1	8	0	1	
T1278 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT WIRE CONNECTIONS OF	0	0	0	8	0	0	
T1279 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT MAJOR ASSEMBLIES OF	0	0	0	8	0	0	
T1280 4 TELEVISION (TV) SYSTEMS - TROUBLESHOOT DOWN TO COMPONENT PARTS	0	0	0	8	0	0	
T1281 4 TELEVISION (TV) SYSTEMS - REMOVE OR REPLACE MAJOR ASSEMBLIES	0	0	0	8	0	0	
T1282 4 TELEVISION (TV) SYSTEMS - REMOVE OR REPLACE COMPONENT PARTS	0	0	0	8	0	0	
U1283 1 PROGRAMMING - PERFORM PROGRAMMING TASKS	6	7	5	8	18	4	PROGRAMMING
U1284 1 PROGRAMMING - USE OR REFER TO DECIMAL SYSTEMS	5	6	5	8	17	2	
U1285 1 PROGRAMMING - USE OR REFER TO OCTIAL SYSTEMS	5	5	4	8	14	2	
U1286 1 PROGRAMMING - USE OR REFER TO HEXADEMICAL SYSTEMS	2	2	1	8	5	1	
U1287 1 PROGRAMMING - USE OR REFER TO 8-4-2-1 SYSTEMS	1	1	1	8	3	0	
U1288 1 PROGRAMMING - USE OR REFER TO FOUR SYSTEMS	1	1	0	8	5	0	
U1289 1 PROGRAMMING - USE OR REFER TO BINARY SYSTEMS	5	6	5	8	18	2	
U1290 1 PROGRAMMING - USE OR REFER TO TIME-SHARING (MULTI-SEQUENCING)	4	5	3	8	14	3	
U1291 1 PROGRAMMING - USE OR REFE TO DATA WORDS	4	5	3	8	12	3	
U1292 1 PROGRAMMING - USE OR REFER TO ADDRESS WORDS	5	5	4	8	14	2	
U1293 1 PROGRAMMING - USE OR REFER TO ADDRESS/SUBADDRESS	4	4	3	8	9	2	
U1294 1 PROGRAMMING - USE OR REFER TO STEERING/INFORMATION	3	3	2	8	8	1	
U1295 1 PROGRAMMING - USE OR REFER TO INSTRUCTION WORDS	4	4	3	8	9	2	
U1296 1 PROGRAMMING - USE OR REFER TO DAP-16	1	1	0	8	3	0	
U1297 1 PROGRAMMING - USE OR REFER TO BINARY CODED DECIMAL (BCD)	5	6	4	6	17	2	
U1298 1 PROGRAMMING - USE OR REFER TO CONTROL WORDS	3	3	3	8	8	1	
U1299 1 PROGRAMMING - USE OR REFER TO RESPONSE WORDS	2	2	1	8	6	1	
U1300 1 PROGRAMMING - USE OR REFER TO WRAPAROUND WORDS	1	1	0	8	3	1	
U1301 1 PROGRAMMING - USE OR REFER TO TO TEST OR DIAGNOSTIC PROGRAMS	5	5	4	8	14	2	
U1302 1 PROGRAMMING - USE OR REFER TO RELIABILITY PROGRAMS	2	2	3	8	5	1	
U1303 1 PROGRAMMING - USE OR REFER TO COMPILERS	2	2	1	8	6	1	
U1304 1 PROGRAMMING - USE OR REFER TO ASSEMBLERS	1	1	1	8	3	1	
U1305 1 PROGRAMMING - USE OR REFER TO MACHINE LANGUAGE	1	1	2	8	3	0	
U1306 1 PROGRAMMING - USE OR REFER TO MNEMONICS	2	2	2	8	6	0	
U1307 1 PROGRAMMING - USE OR REFER TO ROUTINES OR SUBROUTINES	3	1	4	8	5	1	
U1308 1 PROGRAMMING - USE OR REFER TO FLOW CHAPTS OR DIAGRAMS	4	4	4	8	15	1	
U1309 1 PROGRAMMING - USE OR REFER TO ATLAS	0	1	0	8	3	0	
U1310 1 PROGRAMMING - USE OR REFER TO CLAN	0	1	0	8	3	0	

PCT MPRS RESP [illegible] DAFSC/ UNUS/DS GRPS

OCCUPATIONAL ANALYSIS PROGRAM
USAFOMC (ATC) RANDOLPH AFB TX

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TSK	ALL SPC 014	5 SKL SPC 016	7 SKL SPC 017	9 SKL SPC 022	5 US SPC 025	5 0's SPC 026
U1311 1 PROGRAMMING SYSTEMS - PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	2	1	3	0	5	[illegible]
U1312 1 PROGRAMMING SYSTEMS - PERFORM TASKS ON MULTI-LEVEL PROGRAMMING	1	1	2	0	3	[illegible]
U1313 1 PROGRAMMING - WRITE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS	1	1	1	0	3	[illegible]
U1314 1 PROGRAMMING - USE PROGRAMS FOR TROUBLESHOOTING OF SPECIFIC CIRCUITS	3	4	2	8	11	[illegible]
U1315 1 DIGITAL COMPUTERS - PERFORM TASKS ON CONTROL SECTIONS	4	4	3	8	14	1
U1316 1 DIGITAL COMPUTERS - PERFORM TASKS ON INPUT SECTIONS	4	5	3	8	17	2
U1317 1 DIGITAL COMPUTERS - PERFORM TASKS ON OUTPUT SECTIONS	4	5	3	8	17	2
U1318 1 DIGITAL COMPUTERS - PERFORM TASKS ON MONITOR SECTIONS	4	5	3	8	15	2
U1319 1 DIGITAL COMPUTERS - PERFORM TASKS ON TRANSMIT SECTIONS	3	[illegible]	2	[illegible]	11	1
U1320 1 DIGITAL COMPUTERS - PERFORM TASKS ON RECEIVE SECTIONS	3	[illegible]	[illegible]	[illegible]	11	1
U1321 1 DIGITAL COMPUTERS - PERFORM TASKS ON INPUT DEVICES	5	6	3	[illegible]	17	[illegible]
U1322 1 DIGITAL COMPUTERS - PERFORM TASKS ON STORAGE DEVICES	5	6	3	[illegible]	17	2
U1323 1 DIGITAL COMPUTERS - PERFORM TASKS ON OUTPUT DEVICES	5	[illegible]	3	8	17	2
U1324 1 DIGITAL COMPUTERS - PERFORM TASKS ON POWER DEVICES	3	[illegible]	3		11	1
U1325 1 DIGITAL COMPUTERS - PERFORM TASKS ON MONITOR DEVICES	4	[illegible]	3	8	14	[illegible]
U1326 1 MICROPROCESSOR BASED EQUIPMENT - USE OR PERFORM TASKS ON	4	4	4	[illegible]	11	2
U1327 2 DB AND POWER RATIOS - USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	72	[illegible]	71	75	69	74
U1328 2 DB AND POWER RATIOS - USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	32	[illegible]	33	[illegible]	23	33
U1329 2 DB AND POWER RATIOS - USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	71	29	33	42	20	33
U1330 2 DB AND POWER RATIOS - USE VTVM (DB METERS) TO CHECK FOR NOISE OR SIGNAL LEVEL	57	60	53	67	57	51
U1331 2 DB AND POWER RATIOS - USE VTVM (DB METERS) TO CHECK OR ADJUST AUDIO AMPLIFIERS	20	19	20	33	23	19
U1332 2 DB AND POWER RATIOS - USE A HP3550 OR 344A TEST SET TO TO ALIGN AUDIO EQUIPMENT	5	4	6	17	5	3
U1333 DUMMY TASK TO INCLUDE AIRMEN WITH NO FPI TASK RESPONSES	4	4	4	[illegible]	5	3

DB AND POWER RATIOS